

ST FORMAT

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hardware and techniques

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Positive Image

REVIEWED THIS MONTH:

- STRIP CARTOON ● TIME TALK
- TEXTSTYLE 1.1 ● LASERJET 5L
- NAMENET ● ALL THINGS FALCON
- EUROPEAN CHAMPIONS
- ESLA MANAGER ● CONFUSION
- SHEER AGONY ● DEFENDER 2000
- ISLE OF GLASS ● AND MUCH MORE

3D and beyond

Create, render and animate complex
models on your ST – we show you how!

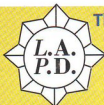
Paris show

All the latest news from France,
including exciting new Falcon add-ons



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The faces behind L.A.P.D...



Software at realistic prices

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LAPD HAS NOW BEEN VOTED TOP PD LIBRARY BY ST FORMAT READERS.



ALL DISKS BELOW ARE ONLY £1.50 UNLESS OTHERWISE STATED



Games

••• ARCADE •••

- G.433 GENOCIDE (1Mb, STE, S/W). Fast space 3D shoot 'em up.
- G.417 STAR VOYAGE: Interplanetary action - requires 2 joystick (3x Star Trek - TNG, 2 disk/£3.00, 1Mb)
- G.413 COMBAT: Free action military shoot 'em up in style of Operation Wolf
- G.410 PLIKMAN ON: One or two player classic 'Pac-Man' with varied music
- G.415 ULTIMATE AERIAL: Best 'em up in the style of 'Mortal Kombat' (STE, 1Mb, S/W)
- G.403 SQUARE OFF: The ultimate turn-based 'Tetris' game (STE, 1Mb) (2 disk/£3.00)
- G.398 KYRIODEIA (STE): Classic arctian blasting action - better G99 for STFM version (1Mb, S/W)
- G.400 FRANTIC: ST/FX Super hit action linear combat simulator - over G401 for STFM (2 disk/£3.00)
- G.247 MEGAFIRE: The classic blast the caterpillar 'Centipede' game (1Mb)
- G.355 DYNAMIGHT: Boring landing and dodging arcade game (STE, 1Mb)
- G.366 DAVE MUNNIE GAMES: 9 games from the master programmer, including Frogger (1Mb)
- G.355 WING LORD: Action duelling game in the style of the classic 'Joust'
- G.380 STARBALL: Portal game - arguably the best PD game on the ST
- G.381 MAX: Help Max find his girlfriend. A 'cute' arcade platform game (1Mb)
- G.383 SUPER PSYCHO KART: High speed platform game to rescue piglets (1Mb)
- G.286 ROCKFALL - SPECIAL EDITION: Tunneling/diamond collecting puzzle game
- G.281 PSYCHO GUY Platform shoot 'em up with Rambo-esque zip (2 disk/£3.00)
- G.279 OPERATION GARFIELD: Classic 'Operation Wolf' type shoot 'em up action (STE)
- G.406 TETRIS & PULE UP: Two very good versions of the 'Tetris' arcade game
- G.171 HAZARD: It's a megabyte version of Pac-Man, 100 new levels
- G.110 LAMARCON: 100 levels of fast arcade action with varied sound FX
- G.201 BLAT: Tetris style three in a row, falling blocks with many added features

••• FANTASY/ROLE-PLAY •••

- G.425 ADAMS OF DOOM: First person view fantasy role-playing game. *NEW* (2 disk/£3.00)
- G.416 DANGEROUS: Detailed fantasy role-playing game. (1Mb, 2 disk/£3.00)
- G.412 NIGHMARE: Classic sci-fi, top-down view role-playing game. (2 disk/£3.00)
- G.431 REALMS OF REALITY: First person view dungeon exploration and monster-bash
- G.351 TOWERS: First person view role-playing fantasy adventure game (1Mb) (2 disk/£3.00)
- G.328 WILLS OF LILLONIN: The ultimate 'Dungeonsmaster' clone with English instructions (1Mb)
- G.426 MYRD WARS: Magical combat in a maze of sliding walls (1Mb, S/W)
- G.358 MOKRA: A complex fantasy D&D based role-playing game (1Mb)
- G.370 MINDMATE: Fantasy adventure with an overhead view
- G.388 DAREKYLE: 'Space Crusade' type droids warfare
- G.262 ALIENUS: Space Marines v Aliens strategy combat game
- G.115 MYSTIC WELLS: Complete 'Dungeonsmaster' style adventure game

••• PUZZLES •••

- G.436 SHREINING WALL SOLITARE (1Mb): Challenging and addictive 'Match it' type game. *NEW*
- G.443 WORD QUEST: Classic word and play word game. 500 puzzles on disk *NEW*
- G.414 MEMORY RECALL: Challenging memory test with digi key sound. (1Mb)
- G.387 SPACESWEEPER: A challenging 'Minesweeper' game in three dimensions
- G.131 JIGWIT: A computerised jigsaw puzzle (1Mb)
- G.288 QUAZMASTER: Multiple-choice answer general knowledge quiz (STE)

••• TEXT ADVENTURES •••

- G.411 RORIC REVUE: A sci-text adventure
- G.434 HATHERS' FANTASY REG HUNT: Adventure for 7 to 12 year olds
- G.394 THE SECRET PARK: A text adventure with graphics for children
- G.425 CALVINHOOF: Dope fantasy adventure set on a far-flung planet
- G.414 A NIGHT ON THE TIGRIS: An adventure with the opportunity to meet the girl of your dreams and...well, she'll set it up for you
- G.001 QUEST FOR THE HOLY GRAIL: Polynesian magical humour
- G.220 UNKNOWN UNDERWORLD: Highly rated large scale text fantasy adventure
- GRAPHIC ADVENTURES •••
- G.383 MONSTERS CITY: Track down twelve gargogues
- G.246 HUSLA: 3D virtual reality fantasy adventure
- G.321 INVESTIGATION: Graphic adventure in the style of Sierra On-Line (2 disk/£3.00)
- G.356 ENDURANCE (1Mb): Space station adventure in 3D virtual reality
- G.200 ANARCHY ACADEMY: 3D graphic adventure to blow up the school
- G.232 GRANDAD AND THE QUEST...3D graphic adventure by Jan Scott
- G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: Graphic adventure (1Mb, 2 disk/£3.00)

••• STRATEGY & OTHERS •••

- G.438 HERO: Human Interaction & Rescue Operation: One time commercial game *NEW*
- G.437 BRIDGE (1Mb): Simulation of the arcade game with voice. *NEW*
- G.438 RACE (1Mb): Try to succeed in the 'bizarre' of the board game adaptation
- G.432 MID-WINTER: Fantasy war game with similarities to 'Civilization' (1Mb, S/W)
- G.131 STAR TREK - THE GAME: Defeat the Klingon threat to the galaxy (S/W)
- G.427 AIR TRAFFIC CONTROLLER: Control arrivals and arrivals at a busy international airport
- G.386 STAR TREK - KUDGON WARS: A Starship Enterprise battle simulation (1Mb)
- G.431 REALMS OF REALITY: 'Dungeonsmaster' type exploration and adventure game
- G.421 WAG: A wargame construction kit (1Mb)
- G.390 INTERNATIONAL MANAGER: European Nations'World Cup management game
- G.381 ANTIMATTER GAME OF GO: Two computer versions of the Oriental game (Groups, Amiga)
- G.344 CHESS-MATE: A chess/draughts game analysis tool
- G.332 CAESAR: Strategy game set around the Mediterranean in 200BC (S/W)
- G.330 GNU CHESS: French chess playing program for all levels
- G.388 STRATAGEM: Two player strategy world war game (2 disk/£3.00)
- G.329 PEGASUS: Space strategy game. Seek out and colonise planets (2 disk/£3.00)
- G.287 THE COARSE ANGLER: Angling simulation game (1Mb)
- G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or 0.5Mb)
- G.324 IMPERIAL CONQUEST: Complex ancient Mediterranean game of conquest (S/W)
- G.325 SOKKER MANAGEMENT: A complex simulation of soccer management (S/W)
- G.217 THE MAZE: 3D adventure game loosely based on 'The Crying Maw'
- G.173 PENGUINS: Move your penguins around the screen 'Lynxman' fashion
- G.10 VEGAS: Roulette, poker, blackjack and slots... without the Nevada sand!

••• FOOTBALL •••

- B.119 FOOTBALL TACTICIAN 1: The original £10.95 Premier League version of the soccer management game
- B.111 INTERNATIONAL CRICKET 1: Animated 3D game (1Mb)
- B.150 SPACE INVADERS: Classic arcade action by Robert Leung
- B.000 MARCH IT: Possibly the most addictive game ever devised
- B.099 HOUSE RACING SIM: Quality sim from the sale right to the track
- B.300 QUEST FOR GALAXIA: The 'Galaxoid' return to your ST
- B.170 PRAXIAN ST: The definitive version by Robert Leung
- B.171 DARK WARS: Role-playing adventure with a 3D view

ST FORMAT TOP 10 GAMES - ONLY £2.00

A special bargain bundle of the top 10 PD and shareware games as selected by ST Format magazine in issue 75. They are: 4-7-11, Colours, Draughts, Grandad and the Quest for the Holy Grail, Grandad and the Search for the Sandwiches, Llamasaurus, Starball, Skello, Super Breakout and Towers.

DAVE MUNNIE GAMES

Munnie Games, some of the most playable and fun-filled games on the Atari, can now be registered via L.A.P.D. Send us the code number, your name and we'll send you the pass-code giving access to extra levels, extra levels, etc.

Cost is just £6.00 per title.
Games that can be registered to be for Amstrad, Famicom and Square Off. All registrations receive a FREE copy of Dave's SEA WOLF game! Pre-registered complete versions of these incredible games may also be purchased as follows:

- A119: ASTEROID: The classic game 'Astroids' with 3D rendered asteroids. (STE, £7.00)
- L120: ASTEROID: The STFM version of the above (STFM, £7.00)
- L121: FRANTIC: Fast action linear combat simulator Frantick (STE, £7.50)
- L122: FRANTIC: The STFM version of the above (STFM, £7.50)
- L123 'SQUARE OFF: Falling block puzzle game in the style of the classic 'Tetris'. (STE, £7.50)

FREE MUNNIE DISK/O'ZINE

For a free copy of Dave Munnie's magazine disk with information and screen shots about his games just send a blank disk and a L.A.P.D. to the address above.

L.A.P.D. Licenceware Games

Possibly the best licenceware range on the ST

Licenceware means that for every copy you buy the author receives a royalty payment from L.A.P.D. This ensures that the authors receive suitable recompense for their hard work thus encouraging them to produce even more excellent programs for the Atari range of computers. It saves you all the fuss and hassle of shareware payments. Licenceware programs are complete and ready to run, there are no hidden fees!

Strategy games

- L.135 ANNER (4.9/5): 30 roleplay inspired by 'Dungeonsmaster' and 'Doom' *NEW*
- L.128 BLOODGOD V2 (1Mb, £3.00): Computer moderated fantasy combat system for one or more players. Includes two free adventure scenarios.
- L.125 BLOODGOD ADVENTURES #1 (£3.00): Six additional adventures for the above BLOODGOD game
- L.124 THE SANDS OF ARKENTON (2.5/5): Govern a Martin mining colony
- L.132 SEA WAR (1Mb, £2.50): Hit-ach version of 'BattleShip'. Design and fight your own fleet
- L.105 CONQUEST #1 (1Mb, £3.00): Rule over a medieval kingdom's economy and armies
- L.104 WAR OVER THE RICH (1Mb, £3.00): Plan and execute a campaign of WWI raids against naive German cities
- L.98 WORLD AT WAR (1Mb, £3.00): A game of economic and military strategy on a grand scale for one to seven players
- L.22 GRAND PRIX MANAGER (£2.50): Simulation game of running a Formula One Grand Prix season
- L.79 DAREKYLE II (1Mb, £3.00): A sci-fi spacestrategy game in which you must defeat the Darklyns forces. Reminiscent of the 'Space Crusade' game
- L.118 THE TOLD SEVEN (3.5/5): by Ben Weston. The five games on one disk. THE UNMANNINGSTIFF: 15, a single-wild-west shoot 'em up game. CLAR: A Hummel's ruling top game. QUEST KNIGHT: A fantasy game. LOGIC PROBLEMS: five challenging electronic puzzles. LOGIC PROBLEMS II, more puzzles
- L.42 OUTWORLD (2.5/5): An arcadestrategy game in which you take control of a space colony
- L.53 HOT DOD (2.5/5): A game of greyhound racing for one to nine players
- L.19 ARTHUR OF THE BRITONS (1Mb, £3.00): A strategy game with arcade sequences
- L.60 CONQUEST (1Mb, £3.00): A 'Gold' game in which your task is simply to survive for one year

arcade games

- L.130 DESERT HAWK (1Mb, £3.00): Control a Black Hawk helicopter through difficult missions
- L.93 PROJECT PURIFY (3.0/5): Attempt to clear twenty sectors of space debris
- L.87 STORM 94 (1Mb, STE, £3.00): Arcade action clearing aliens from a wrecked space-neighbor
- L.106 STORM 94 (1Mb, STFM, £3.00): As L87 above but for the STFM
- L.86 PLUFFERS (1Mb, £3.00): A platform game across many levels as you guide a blue fluffy creature in an attempt to rescue his girlfriend
- L.80 MUNCHKIN (8.2/5): The perpetually popular Pardon postman!
- L.116 STEETS (3.0/5): Drive your motorcar around the streets collecting foodstuffs
- L.97 FISH THINK (3.0/5): A game for younger players who must find food for their fish without getting water
- L.117 CHRONIC INVADERS (2.5/5): The 'Space Invaders' return in this reworking of the all time classic computer game
- L.61 3D ASTEROIDS (2.5/5): Based on the classic 'Astroids' game - but in 3D

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adventure & role-playing games

- L131 WANDERING SCIENCE (£2.50). Solve the puzzles on an alien vessel.
A graphic adventure.
L132 RHYTHM OF GLORY (£3.00). A word and strategy role-playing game.
L133 DEMONIC DREAMS (£3.00). A fantasy adventure game with an overhead view and detailed point of view.
L134 TIME MACHINE (£3.00). A day-to-day adventure with over 100 locations and over 40 graphic screens.
L135 CRACKHANE (£3.00). High adventure in a fantasy land.
L136 STONE COLO SOBER (£3.00). A traditional adventure game but with a point and click interface.
L137 BISHAZARD (£1M). £3.00. A first person perspective game to clear a space heigher of alien creatures.
L138 DEAD OR ALIVE (£3.00). A large, complex and humorous text adventure game.
L139 THE CURSE OF AZNIEL (2 disk, £4.00). A graphic fantasy role-playing/strategy game.
L140 MURDER ON THE ORION EXPRESS (£3.00). A murder mystery game with an almost infinite variety of events.
L141 DIAMON (£3.00). Trapped in a store cell, your first task is to escape before the resident demon gets back. 3D view.

puzzles

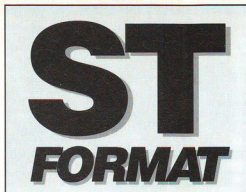
- L133 LAZER (£2.50). Use mirrors to direct a laser around mazes. **"NEW"**
L110 QUAZUP PZ (£3.00). A mind-bending tile flipping game.
L112 BLACK LETTERS (IM). £3.00. A word search game to find a seven letter word hidden behind a grid of squares.
L102 DS COMPLICATION #4 (£3.00). On this disk are 16 BRAIN PUZZLES, test your brain to the limit. SHAPES, make shapes from different pieces, UNIC, form a chain across the screen. QUAZUP, multi-choice question and answer game.
L101 DS COMPLICATION #3 (£3.00). On this disk are: OUTRAGEOUS FORTUNE, a collection of logic and maths challenges. MATCH-MARK 2, match symbols on hidden cards. FRAME OF MINDS, a gambling game. CRYPTOGRAM, based loosely on the TV program "Countdown".
L100 DS COMPLICATION #2 (£3.00). On this disk are: QUEST FOR KNOWLEDGE (IM), keep us 12 hidden items from men. REBOUND, a bat and ball game. GALACTIC FRUITBOWL, a combination of the fruit machine and the trivia quiz. GREY MATTER, a word game.
L99 DS COMPLICATION #1 (£3.00). On this disk are: ACEHAGE, a gambling program. WITZ-A-MUNCH, a fun program comprised of ten tests. MINIDOCK, a quiz program. MARIO, make match up hidden symbols.
L94 TILES IN SPACE (£3.00). A computer version of the sliding tile puzzle game.
L94 GRID MANIA (£3.00). A word search game for 1 or 2 players.
L92 BAMBOLLE (£1.00). A puzzle game where you must turn all the symbols on a 25 square grid to higher scoring ones.
L84 JUPPERS (£3.00). A puzzle game where you must rescue microscopic creatures.
L84 WORD WIZARD (£3.00). A one or two player word guessing game with different levels of difficulty.
L83 ZIGGY (£3.00). A puzzle game of turning globes.
L75 FREAKED OUT (£3.00). A jigsaw collection puzzle game.
L74 NICE BITTES MYE MEG! #1 (£3.00). On this disk, ARMOKANI, place letters of words into empty slots to a grid. PAPER LOGIC, a game based on logic. REGA, a tile flipping game on a 5 x 5 grid. LOGICA, a three phase logic/puzzle game.
L66 HEARTSHEM (£3.00). An infatuation and highly addictive puzzle game played on a 7 x 7 grid.
L1 PI SQUARED (£2.50). A puzzle game. Convert all the symbols to PI.
L14 DICEY (£2.50). A challenging dice game in the style of the classic "Snitcher".
L40 GRIDWORD (£2.50). A word game in which you attempt to make the longest word possible.
L45 ENERGETIC (£3.00). A puzzle game that challenges you to find those exact positions that start a nuclear reactor.
L39 NICE BITTES #1 (£2.50). On this disk, GRIDWORD: A word game for up to 4. REGA: A tile-flipping strategy game.

art & graphics

- A99 MINIPICS II: All resolution picture converter and catalogue (IM).
L77 AUTO-STEROGRAM: Create your own 3D "Magic Eye" picture (IM) (£3.00).
A95 VISUAL ILLUSIONS: A collection of 24 "Magic Eye" 3D pictures.
A98 STEREOGRAM ANIMATIONS: Now you can "Magic Eye" picture movies!
A93 KODAC: A complete version of the stunning psychopicture game.
A1 AND ST: Commercial quality animation program (base cost £60.00 to buy).
A84 GENIUS/LEAD: Video view, convert just about any picture format (IM).
A55 CRACK ART: Demo version of the excellent Genart program.
A75 PICOFISH by Martin Brownlow. Make films from multiple 3D polygon objects.
A14 FANTASY SLIDESHOW: Spectrum 512 pictures on fantasy theme (over 165 only).

clip art

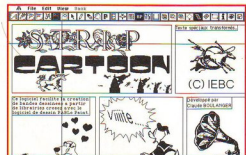
- (Where PCK and IMG formats are offered you must state which you require)
A103 OFFICE CLIP ART: 33 IMG or PCK images of office related items.
A104 KESQ 1: A 100 image, 1280x1024 sequence with many features.
A100 ANIMALS CLIP ART (5 disks/£7.50). Over 170 IMG or PCK images of animals.
A102 ASTROLOGIC CLIP ART (3 disks/£4.50). 36 IMG or PCK images of astroic signs.
A101 SPACE CLIP ART: 38 images of the final frontier in PCK or IMG format.
A106 CHRISTMAS CLIP ART (3 disks/£4.50). 50 images in PCK or IMG format.
L26 L27 L28 L29 L30 L31 L32 L33 L34 L35 L36 L37 L38 L39 L40 L41 L42 L43 L44 L45 L46 L47 L48 L49 L50 L51 L52 L53 L54 L55 L56 L57 L58 L59 L60 L61 L62 L63 L64 L65 L66 L67 L68 L69 L70 L71 L72 L73 L74 L75 L76 L77 L78 L79 L80 L81 L82 L83 L84 L85 L86 L87 L88 L89 L90 L91 L92 L93 L94 L95 L96 L97 L98 L99 L100 L101 L102 L103 L104 L105 L106 L107 L108 L109 L110 L111 L112 L113 L114 L115 L116 L117 L118 L119 L120 L121 L122 L123 L124 L125 L126 L127 L128 L129 L130 L131 L132 L133 L134 L135 L136 L137 L138 L139 L140 L141 L142 L143 L144 L145 L146 L147 L148 L149 L150 L151 L152 L153 L154 L155 L156 L157 L158 L159 L160 L161 L162 L163 L164 L165 L166 L167 L168 L169 L170 L171 L172 L173 L174 L175 L176 L177 L178 L179 L180 L181 L182 L183 L184 L185 L186 L187 L188 L189 L190 L191 L192 L193 L194 L195 L196 L197 L198 L199 L200 L201 L202 L203 L204 L205 L206 L207 L208 L209 L210 L211 L212 L213 L214 L215 L216 L217 L218 L219 L220 L221 L222 L223 L224 L225 L226 L227 L228 L229 L230 L231 L232 L233 L234 L235 L236 L237 L238 L239 L240 L241 L242 L243 L244 L245 L246 L247 L248 L249 L250 L251 L252 L253 L254 L255 L256 L257 L258 L259 L260 L261 L262 L263 L264 L265 L266 L267 L268 L269 L270 L271 L272 L273 L274 L275 L276 L277 L278 L279 L280 L281 L282 L283 L284 L285 L286 L287 L288 L289 L290 L291 L292 L293 L294 L295 L296 L297 L298 L299 L300 L301 L302 L303 L304 L305 L306 L307 L308 L309 L310 L311 L312 L313 L314 L315 L316 L317 L318 L319 L320 L321 L322 L323 L324 L325 L326 L327 L328 L329 L330 L331 L332 L333 L334 L335 L336 L337 L338 L339 L340 L341 L342 L343 L344 L345 L346 L347 L348 L349 L350 L351 L352 L353 L354 L355 L356 L357 L358 L359 L360 L361 L362 L363 L364 L365 L366 L367 L368 L369 L370 L371 L372 L373 L374 L375 L376 L377 L378 L379 L380 L381 L382 L383 L384 L385 L386 L387 L388 L389 L390 L391 L392 L393 L394 L395 L396 L397 L398 L399 L400 L401 L402 L403 L404 L405 L406 L407 L408 L409 L410 L411 L412 L413 L414 L415 L416 L417 L418 L419 L420 L421 L422 L423 L424 L425 L426 L427 L428 L429 L430 L431 L432 L433 L434 L435 L436 L437 L438 L439 L440 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Does the full version of *FAST Club's* comic strip creator live up to the promise of issue 77's exclusive Cover Disk demo? We give you the answers.



Strip Cartoon is your chance to create immortal comic strips.

23 TIME TALK

Check out an indispensable utility for musicians who don't like grappling with complex mathematics.

24 TEXTSTYLE 1.1

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25 NAMEJET

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26 ALL THINGS FALCON

The latest CD-ROM PD and shareware compilation gets a thumbs-up from our reviews editor.

27 LASERJET 5L

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28 EUROPEAN CHAMPIONS

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29 ESLSA MANAGER

Lead your team to domestic and European glory in Merlin's new football management simulation.



Away the lads! Pass, tackle and shoot your way to glory with *European Champions*.

Sheer Agony puts you on the trail of an antidote and a potential murderer.



30 CONFUSION

Does the Falcon needs another puzzler...

31 SHEER AGONY

A good-looking adventure game for mystery lovers.

33 DEFENDER 2000

Jeff Minter's long-awaited follow-up to *Tempest 2000* finally appears on the Jaguar.

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6 COVER DISK

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62 GAMEBUSTERS

The first part of a complete solution to *Towers*, plus loads of cheats for Jaguar owners.

65 FEEDBACK

We cornered Karen before she escaped on holiday, forcing her to answer your letters before jetting off.



The truth is up the back somewhere – try page 65.

66 NEXT MONTH

World conquest is next on our schedule, but here's all you need to know right now. Issue 81, coming soon.

THE ST FORMAT X-FILES

30 Monmouth St, Bath, Avon BA1 2BW • 01225 442244
Fax: 01225 465982, Ad: 01225 465981 • 0191 3702659

Internet: www.futurenet.co.uk

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Editor: Karen Invisable Elephant Level
Acting Editor: Nick Argent Fox Mulder Peers
Art Editor: Paula Margaret Scully Mike
Production Editor: Mary Agent Dana Scully Lokine

Reviews Editor: Frank Walker Skinner Charlton
Music and MIDI Editor: Andy Langley Curtis
Contributors: Dag Byens Armstrong, Peter Deep
Throat, Crash, Mac Trushko, Marsden, Andrew 'Ake
Keynes' Gilly, Dave 'Cigarette-smoking Man' Barrington,
Shawn 'N' Campbell
Cover: Pictor International, Chris Stocker

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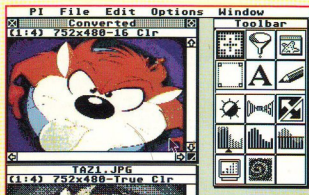
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Cover Disk

Using this month's exclusive Cover Disk demo, Nick Peers warps himself into the Tazmanian Devil. Karen crushes him with a boulder. Hilarious.



With Positive Image, you can edit TrueColour images even in low res on an ST.

POSITIVE IMAGE DEMO

By: Floppyshop
Machines: All Ataris
Memory required: 1MByte
Resolution: All
Uncompressed size: 713K

This massive demo of new image processing package *Positive Image* is exclusive to *ST FORMAT*. Once you've decompressed it, turn to the *Altered Images* feature (starting on page 14) to find out how to transform your

pictures. The save function is disabled in the demo, as are several of the tools.

Getting started

Floppy drive users need to copy *POS_DEM1.TOS* and *POS_DEM2.TOS* to separate disks. Double-click on each in turn to dearchive their contents before transferring all the files on to a single floppy disk formatted to 80 tracks and ten sectors.

POSITIVE IMAGE TOOLS

- 1 Pixel tools.
- 2 Filter tools.
- 3 Geometric tools.
- 4 Block tools.
- 5 Text tools.
- 6 Retouch tools.

- Pixel tools menu**
- 7 Adjust image: alter the picture's brightness and contrast.
 - 8 Stretch contrast.
 - 9 Negate: create a colour negative of your picture.

- 10 Threshold: alter the image's threshold.
- 11 Histogram: view the image's colour histograms.
- 12 Equalise: equalise the picture's colour levels.

- 13 Gamma correction.
- 14 Stereogram: create a stereogram (not possible with mono or TrueColour images).

- Filter tools menu**
- 15 Load filter: load one of the 12 filters supplied in the demo version.
 - 16 Save filter: save the current filter to disk.
 - 17 Edit filter: edit the current filter.
 - 18 Standard filter: apply the standard filter to the image.

- Geometric tools menu**
- 19 Scale image: resize the image by a specified percentage.
 - 20 Resize image: change the image size (in pixels).
 - 21 Mirror image: mirror image horizontally, vertically or diagonally.
 - 22 Rotate image: rotate the image in any direction.
 - 23 Horizontal shear: alter the picture's horizontal edges to distort the image.
 - 24 Vertical shear: alter the picture's vertical edges.
 - 25 Object warp: reposition each of the picture's four corners to warp it to a user-defined shape.
 - 26 Control warp: warp the image around a central point.

- Block tools menu**
- 27 Rectangular block: create a rectangular block for

- editing purposes.
- 28 Elliptical block: define an elliptical block for editing.
- 29 Bezier area: define a block by clicking the mouse around the area to create a series of joined points.
- 30 Trace area: trace your own block using the mouse.

- Text tools menu**
- 31 Select font: select the size and font you require. You can use GDS fonts.
 - 32 Unload fonts: unload any extra fonts to save memory.
 - 33 Enter text: enter and format any text you wish to place on the picture.

- Retouch tools menu**
- 34 Blur/sharpen image: blur or sharpen a greyscale or TrueColour image.
 - 35 Dodge/burn image: lighten or darken the area beneath the mouse on greyscale or TrueColour images.
 - 36 Rubberstamp: multipurpose cloning tool.
 - 37 Area fill: includes controls for opacity, fade and strength.
 - 38 Pencil: pencil-like (single pixel) drawing tool.
 - 39 Paintbrush: brush-like (variable width) drawing tool.
 - 40 Line: draw a line between two points.
 - 41 Erase: erases everything within a 15x15 block.
 - 42 Spray can: the traditional airbrush tool with opacity, fade and strength controls.

OTHER FILES

In order to cram everything on to this month's Cover Disk, we've had to compress ImCon, Free Space and AceGamer (Ace of Hearts) into a single TOS file, OTHERS.TOS. Double-clicking on it will dearchive three folders containing the programs.

Deadland is run by copying DEADLAND.TOS to your blank disk and double-clicking on it to dearchive the DEADLAND folder.

Do you dither?

Before you start experimenting with your images, here's everything you need to get around our exclusive demo.

Once your image is loaded, you can, if you like, convert it to the resolution you're working in by selecting Convert from the Options menu. If you select Monochrome, you are given several dithering options which make the screen image more presentable.

Most of the options you'll be working with are found in the Toolbar. From here you can resize and warp your image, alter its colour and contrast, or even turn it into a negative. The Retouching tools include several rudimentary drawing tools for making small changes to selected areas.

We've included an exhaustive annotation (left) that tells you exactly what each icon does. For a more practical look

at these functions, turn to page 14 for our extensive guide to image processing.

The full monty

The most obvious benefit of upgrading to the full version of *Positive Image* is that you'll be able to save your work. The printing commands and various tools (such as *SpeedoGDS* support) are also fully enabled. Also, there are more modules, including direct support for GIF and PCX images.

Falcon and other 68030 users (including owners of Pak 68/3 accelerators) will want to purchase the enhanced 68030 version, which makes the most of your extra processing speed.

The full version will retail for £79, but Floppyshop has a special launch offer of £65 plus post and packing. See the README file for details, and watch out for a review of the full version 'real soon now'.



A-ha's Pal Waaktaar is about to release a solo album to rival Morten Harket's effort. And this is *Positive Image* on the Falcon.

Dithering enables you to turn TrueColour pictures into usable images. You need to select your original image carefully, however.

SUPPORTED FORMATS

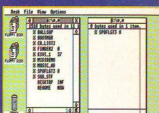
Positive Image supports a whole host of image types, including the popular TIFF, JPEG, TGA, IFF, Degas, Neochrome, Tiny and Spectrum 512 formats.

If you have a GIF or PCX file, you can use ImCon to convert it to the IFF format, which is recognised by *Positive Image*.

COVER DISK KNOW-HOW



1 Assuming you have a single-drive system, insert your Cover Disk back-up into drive A. Double-click on the drive A icon to access it. Next, double-click on the drive B icon.



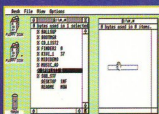
5 Just follow the instructions on the screen until the file or folder you wished to copy has been transferred. It'll be displayed in drive B's window. Now you're ready to dearchive your software.



2 When prompted, remove the Cover Disk and insert your blank disk into drive A. Click on OK and a separate window should appear with the contents of the disk within it.



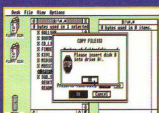
6 Ensure your blank disk is in drive A and double-click on the drive A icon to open up its contents.



3 Next, click and hold down the left mouse button on the file or folder you wish to copy across to your blank disk. Drag the file over to the drive B window before releasing the button.



7 Double-click on the TOS file to begin decompressing it. A list of files will be displayed as they are decompressed. You'll then be asked to press any key.



4 An alert box will tell you to insert disk A (your Cover Disk). Do so, click on OK and follow the on-screen instructions.



8 The relevant folders and files should now appear in drive A's window. To free up more disk space, drag the TOS file over the trashcan icon to delete it.

PROBLEMS?

- Write-protect your Cover Disk. Slide the black tab so you can see through the hole.
- Make a backup using the Back Up program. Never run anything except Back Up directly from the Cover Disk.
- If you have an old STFM and can't read the Cover Disk, you need to upgrade to a double-sided drive.
- If you are having problems with a Cover Disk program, re-read the instructions and any DOC files. If you still have problems, call the Cover Disk Hotline on 01225 442244 on Wednesdays between 2pm and 6pm only.
- If you can't load, copy or back up your

Cover Disk, it may be faulty. Try calling our technical support line on 0891 715929 (weekdays 10am-12.30pm and 1.30pm-4.30pm). Calls cost 39p per minute cheap rate, 49p at all other times.

- Alternatively, send the disk, a padded self-addressed envelope and two stamps to: ST FORMAT March Disk Returns, Tib Pic, Tib House, 11 Edwards Street, Bradford BD4 7BH (if the disk is faulty we will refund the postage). Don't send faulty disks to our Bath or Somerset offices - we don't keep stocks of Cover Disks.
- If you have any other hardware or software queries, contact the publisher.



Slab: protects against mudholes. Limited lifespan.

Solar tower: provides battery power. Two spaces for crew.

Oxygen plant: produces oxygen. Two spaces.

Water tower: produces water. No crew space.

Mudbag: limited protection against enemy fire.

Droid: operates as a crew member, but doesn't count as a live one.

Howva deluxe: mobile carrier. Immune to mudholes. Carries four.



Branson transit: carries 12 crew.

Gun tower: fires automatically (directed when crewed) at any enemy.

Dish: enables a radar screen for a limited view of the surrounding area.

Roving missile carrier: armed with a powerful missile launcher. Two crew spaces.

Hut: shelters up to eight people from enemy fire.

Hospital: restores up to eight crew members to full strength.

Shop: starts the escape ship project. One live crewmember required.

* Life support game only.

IMCON 1.1

By: Christop Pfisterer

Machines: All Ataris

Memory required: 512K

Resolution: All

Uncompressed size: 132K

ImCon is a freeware graphics converter with several image processing options. It can, for example, be used to convert graphics files into a format

recognised by our *Positive Image* demo.

Picture format

The main use for *ImCon* is to convert pictures from one graphics format to another. Because the *Positive Image* demo doesn't support certain formats, such as GIF and PCX, you may have problems loading your pictures. *ImCon* enables you to convert GIFs

DEADLAND

By: Justin Ward

Machines: All Ataris

Memory required: 1MByte

Resolution: ST low/medium

Uncompressed size: 423K

This superb *Canon Fodder*-esque program was last month's PD and Shareware Game of the Month. Can you survive the horrors of *Deadland* and save your crew?

Planet of Mud™

You've crash-landed on the planet *Deadland* and must evacuate as many of your remaining crew as possible. To do this you need to build a new ship within 31 Ursulan days. At the same time, you need to keep your crew alive and safe from enemy fire. Thankfully, those on guard duty are intelligent enough to automatically fire at any enemy who ventures too near.



Your very own shanty town, painstakingly created from nothing. But there's no time to relax - you've got to keep going if you want to survive.

and PCXs into a format recognised by *Positive Image*, such as IFF.

ImCon is a powerful program in its own right. You can resize images, convert them to a different format (mono users

can dither multi-coloured images, for example), and even strip pictures of unused colours to free up a limited palette. More information about *ImCon*'s capabilities is found in *IMCON.DOC*.



ST owners need to convert 8-bit and TrueColour images to greyscale before attempting to view them in *ImCon*.



ImCon holds TrueColour and 8-bit images in memory, so you can manipulate them in any ST resolution without reducing the colour depth.

WE WANT YOUR PROGRAMS

We pay for your software - so if you have anything that's good, original and preferably short that you think deserves to go on *ST FORMAT*'s Cover Disk, send it with this form and full documentation to Nick Peers, Cover Disk, *ST FORMAT*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Name

Address

Daytime phone

Program title

Total size in K

On a separate sheet, explain what the program does and why it's so brilliant.

Remember to: ■ Include on-disk and paper documentation ■ Write your name and address on the disk ■ Use a virus-free disk ■ Keep a copy of your program, contributions are non-returnable ■ Enclose an attractive bribe. A Roland XP-10 synth would be nice. ■ Not that it makes a difference.

Please sign the following declaration: This program is submitted for publication in *ST FORMAT*. It is wholly my own work and I hereby agree to indemnify Future Publishing against any legal action should copyright problems arise.

Signed Date

There are two levels of play: the training mode enables you to concentrate on honing your combat and construction skills, while the life support game adds an extra element – keeping your troops alive in the harsh environment of Deadland. It introduces air, water and battery needs.

Your ultimate aim is the construction of a new ship, but you can allocate builders to more immediate needs. Gun

emplacements, vehicles and even hospitals can all aid your cause, although they won't stop the natives and environment acting against you.

It's these extra elements which lift *Deadland* above *Cannon Fodder*. You'll be thinking on your feet from the word go, and time is a luxury you'll never have. Make sure you digest *DEADLAND.DOC* fully before embarking on your mission – you'll need it.



Now, that's one serious piece of weaponry. Even if you're resigned to your fate, the roving missile carrier enables you to take some of the enemy with you.

FREE SPACE

By: Vanel Remi
Machines: All Ataris with a hard drive
Memory required: 512K
Resolution: All
Uncompressed size: 12K



Free Space, unsurprisingly, tells you how much free space is left on your hard drive.

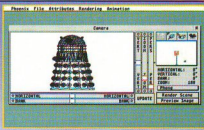
Free Space is a simple program that tells you how much of your hard drive is unused. Unlike other programs (and the ST's own Show Info function), *Free Space* calculates the free space on each and every hard drive partition in seconds rather than minutes.

Oh so simple

To run *Free Space*, simply double-click on *FREESPC.PRG*. A tiny dialog box appears and the program quickly calculates all the free space left on each hard drive partition. An overall total is given at the end and, erm, that's it. Not even aliens, let alone elephants.

3D FILES

Enclosed in the 3DFILES.TOS archive are several models of a Dalek to accompany Doug Armstrong's tutorial on page 39. You'll find 1MByte and 4MByte objects for use in *CyberStudio* and a 4MByte object for use with *Xenomorf 2* (you can load all these objects into the *Xenomorf 2* demo from Cover Disk 76). The README file provides all the information you need.



Since that immortal scene from *Remembrance Of the Daleks*, the old "They can't even climb the stairs" gag has sadly become redundant.

HTML FILE

Frank Charlton's HTML series (see page 52) comes to an end this month, but he's thoughtfully created a HTML file that provides links to Web sites with lots of information about HTML coding. You'll need the *Internet Access Pack* from Cover Disk 78, plus a modem and an internet account, to access the sites featured. If you're still stumped, we'll be featuring a rough guide to the Internet next month.

ACE OF HEARTS

By: The Ace
Machines: All Ataris
Memory required: 512K
Resolution: ST low/medium
Uncompressed size: 22K

Ace of Hearts (AceGamer) is for those of you with a hard drive and a desire to play games. It enables you to load games without fiddling around with Auto folders and Accessories.

Aces high!

Ace of Hearts is useful in one of two ways. First, you might have several games on your hard drive that you'd like to be able to access directly on boot-up. This is because you're lazy, or more seriously, you have limited memory which your boot programs and Accessories eat into.

Second, perhaps your hard drive always boots when you re-set your ST, even though sometimes you'd much rather play a game from floppy disk.

Ace of Hearts enables you to load and run a combination of floppy- and hard-disk-based games from its menu. It won't run protected disks, but it'll run any hard drive game or any floppy disk that can be read from the GEM desktop.

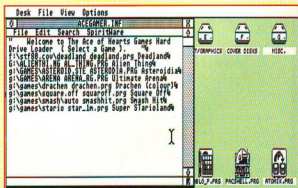
When loaded, *Ace of Hearts* looks for an *ACEGAMER.INF* file, which contains all the options and paths to your files. You can edit this file using its parameters using a standard text editor. If, for example, you'd copied *Deadland* from this month's Cover Disk into partition D of your hard drive, you'd want to include a line like this:

```
d:\deadland deadland.prg
Deadland
```

Running Free

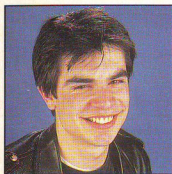
Once you've completed all of your changes, save *ACEGAMER.INF* to the root directory of your boot drive. Then, copy *ACEGAMER.PRG* into your Auto folder before re-sorting the folder – so it now boots first.

After your hard drive has booted up, and before any Auto programs are loaded, hold down [Control] to run *Ace of Hearts*. A menu screen will pop up – follow the on-screen instructions to select the game you wish to play.



An example INF file under construction in *SpiritEd* from Cover Disk 70.

Ace of Hearts is the perfect program for running games from your hard drive quickly and easily.



STF News...



Nick Peers and Frank Charlton keep their fingers on the racing pulse of the feverish Atari scene.

SNIPPETS

Merlin PD is distributing the full version of *Rollercoaster Experience* for £14.95. It will also be handling *NeoTrek's The Power and The Glory* at £24.95 (see STF 79 News). Call = 01452 770133 for more details.

A new version of *ExtenDOS Pro*, the CD-ROM driver, has been released in the US by Anodyne Software. Version 2.3 supports direct audio-CD-to-disk recording. A free upgrade is available for UK users should contact System Solutions on = 0181 693355.

The British Film Institute is to start preserving video games alongside early films and television programmes at its *National Film and Television Archive* in Berkhamsted. This means classic ST games may soon be rubbing shoulders with Charlie Chaplin and early episodes of *Dr Who*.

Games from all kinds of computers and video consoles are wanted, and an exhibition is planned for Christmas 1996. If you have any interesting finds, send details to Tony Hetherington at: BFI, 21 Stephen Street, London, W1P 2LN.

Shake-up at Atari



Despite rumours to the contrary, Atari is adamant that it is not about to abandon the Jaguar.

Just after issue 79 went to press, the Internet rumour-mill cranked up to full steam again, leading to an explosion of Atari-related rumours and news.

American *Wire* journal *Multimedia* ran a story alleging that Atari was discontinuing all Jaguar development to concentrate its \$50 million assets on investing in "video game software companies." A day later, Atari's chief financial officer August Liguori hit back

via the NEXT Generation OnLine Web site, saying: "We sounded this market in the first place and we are not about to give it up. We are still supporting the Jaguar and are continuing with our recently

announced plans as regards Atari Interactive."

The rumours began when Ted Hoff, Atari USA's Chief Executive, suddenly left Atari. This sparked a new round of stories claiming Atari's demise is imminent. Speculation mounted when Net users discovered Atari UK's MD Darryl Still had resigned from the company at roughly the same time. Darryl

explained to us that his decision was motivated by career and financial priorities, stressing a lack of faith in Atari's future was not the reason.

Darryl also revealed that Atari President Sam Tramiel has been hospitalised with an unspecified heart condition. Consequently, his father, Jack Tramiel, has returned to take the reins at Atari – a move apparently linked to Hoff's departure. As this issue goes to press we have no further news on Sam Tramiel's health. We wish him a speedy recovery, and we'll continue to monitor Atari over the coming months.

FRANK CHARLTON



Jack Tramiel has returned to take the reins of Atari following the hospitalisation of his son, Sam (pictured).

Top Byte news

Top Byte continues to support the Atari market and has several new releases under development. *Alien Thing: The Director's Cut* boasts many extras, including a two-player option, more levels and a new perspective which enables

aliens to hide from your roaming characters. These enhancements mean, at present, that it will require 2MByte or more to run, but a 1MByte version is planned for future release.

Kryptonite Data, a huge 3D shoot-'em-up for all 1MByte

STs, is available now. You're given the option of piloting a tank or a plane, and Top Byte is offering a special discount for ST FORMAT readers. The game retails for around £20, but if you order before 1 March you can get a copy for just £16.99.

Finally, in for



The Director's Cut boasts a whole new perspective for Alien Thing addicts.

review is *Computer History*, a mammoth 17MByte of data crammed on to three disks. It costs just £11.99 and contains extensive details about no less than 1,500 computers. As with

The Director's Cut, it currently requires 2MByte of memory, but a cut-down version is planned for 1MByte machines. For more information, contact Top Byte on = 01622 763056.



The Director's Cut boasts loads of new options, sound effects and animations. That's why it requires 2MByte.

Alien invasion!

Bio Hazard 2: The Xeno Wars is a new game for the Atari from Village Software. Unlike the original shareware release, *Bio Hazard 2* is a top-down strategy game along similar lines to *Laser Squad* and *Rebelstar Raiders*. You control a crack squad of troops and must battle through ten levels, the objectives of which range from mere survival through to destroying parts of a complex. Once again, it isn't aimed at diplomats.

You'll be opposed by aliens, bio-droids, land mines and other nasty surprises. Each character has a set number of points and you must allocate them to movement, collecting items and firing on your enemies. Once you've completed your turn, your opponent – computer or human – has a go. STE and Falcon owners get improved sound effects via the DMA chip and the option to use the Jaguar Joypad in place of the mouse or keyboard.



The original *Bio Hazard* was a *Dungeon Master* clone set in space. *Bio Hazard 2* takes a fresh approach to the Aliens theme.

Bio Hazard 2 will retail for £19.95 and should be available in March. Contact Village Software on ☎ 01275 843241 for details.

In space no one can hear you scream – but if someone crept up on me like that, they'd know about it light years away.

AAUG RESURRECTED

Harry Sideras has resurrected the Association of Atari User Groups (previously run by Ken Ward). The AAUG maintains a directory of user groups and provides contact details for ST and Falcon owners wishing to join this extensive support network.

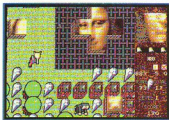
Harry has already updated the details of numerous groups – if your group has yet to be

contacted, drop him a line with all the relevant details for inclusion in the directory.

Individuals requiring information about other user groups should include an SAE and disk. The address to send all your correspondence to is: UK Association of User Groups, 49 Haywood Road, Tile Cross, Birmingham B33 0LJ.

ST ego boost

Goodman International has released *Ego*, a colourful arcade puzzle game for all STs. You play an elephant called



Ego should appeal to all ages, and combines arcade, strategy and puzzle elements.

Ego (Did you say invisible elephants? See page 65 – Agent Peers). To win, you must travel through 30 levels rebuilding famous faces from 25 pieces which are scattered around a maze. You are up against a time limit and evil androids, but there are many bonuses available, plus hidden conveyors, transporters and so on.

Ego retails for £19.95 and we'll be reviewing it next month. In the meantime, you can order the game from Goodmans on ☎ 01782 335650.

PD AND SHAREWARE

Croft Soft has announced four new **Shareware Titles** for 1996: *Trader 2*, *Mole Mayhem*, *Software House ST* and *Bombtari*. All four will be available from Merlin, Floppyshop or LAPD at £2 each.

Croft Soft is also looking to set up a range of commercial software and wishes to hear from graphics artists, musicians and programmers (in Basic, C or assembler). Initial releases will be designed for the ST, but future projects may involve the Falcon. Interested parties should send examples to: Croft Soft Software, The Croft, Hope Road, Nibley, Nr Yate, Bristol BS17 5JH.

How to Code 3 is a new **disk magazine for Falcon programmers**. Issue three features articles on *Doom* and fire effects, plus beginners' courses in C and DSP programming.

The registered version costs £7.50. Contact UK distributor Michael James at 79 Norse Road, Glasgow, G14 9EF, access: <http://vgrelb.src.gla.ac.uk:8000/~mjames/computers> or e-mail: mjames@vgrelb.src.gla.ac.uk for more details.

SDPD has moved. Its new address is: 59, Hillborough Road, Wyke Regis, Weymouth, Dorset, DT4 9JE.

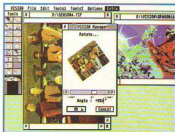
16/32 News

Following last month's news story, 16/32 Systems has announced more details of the new products it has acquired.

Vision is an art package for all Ataris that appeared in France last year (a demo of the French version featured on Wonder Disk 75). It features all the usual graphics tools, plus support for *SpeedoGDOS* and *GDOS* fonts, enabling you to mix graphics with text in a professional manner. *Vision* costs £65, and comes with an English manual. Look out for a review next month.

Just before going to press, we discovered that 16/32 is also distributing the game

Sheer Agony for both 1MByte STs and the Falcon. The Falcon version is reviewed on page 31, but you can now acquire either version for £29.95. Give Nick Harlow a call on ☎ 01622 710788 for more details.



The release of *Vision* gives us a chance to place our monthly *Star Trek* shot.

Chortle wildly

Comedy Review is the latest launch from *ST FORMAT's* very own Future Publishing. It will cover "every melon-freakin' aspect of comedy," according to editor Andy Lowe, from television through stand-up to books and theatre.

It will retail at £3, but we've got a special voucher which entitles you to £1 off issue one when you take it into any branch of John Menzies or WH Smiths. We're sure it'll be a gag-a-minute map, but will it have *Star Trek* pictures?

£1.00 off

Comedy Review at WH Smith and John Menzies With This Voucher

TERMS AND CONDITIONS

1. This voucher entitles you to £1.00 off when you purchase a copy of *Comedy Review* from branches of WH Smith and John Menzies within the UK. 2. Offer exclusive to WH Smith and John Menzies. 3. Not exchangeable for cash or any other merchandise. 4. Voucher cannot be combined with any other promotional offer or staff discount. One voucher per purchase. 5. Valid only for issue one.

Receipt No.

Till No.

Staff Initials

Paris Atari Show

The Paris Atari Show was well worth a visit. Andy Curtis reports on the hardware, the software and the people who made it happen.

The Forum European des Applications Atari took place at the Parc des Expositions in the Porte de Versailles, Paris, on 16 and 17 December, 1995. Composcan (France) had planned a competing show the week

before, but at the last minute it decided to pool forces with OXO Concept to make a single, bigger, show.

The French public service strikes were at their height, but the show organisers decided to go ahead anyway, despite knowing that a significant

number of exhibitors would be unable to attend. Nevertheless, there were sufficient stands (about

20) in what closely resembled a large aircraft hanger to make the show well worth a visit.

Approximately 1,000 people attended over the two days. This number was significantly down from the first show last year. The organisers attribute the decline to the



A Falcon Linux user group demonstrated the power of this UNIX-like operating system. UK readers can obtain Linux from System Solutions (☎ 0181 6933355).

strikes, which made getting to the show difficult.

The French Atari user-base is a small but committed one, according to a number of the exhibitors we spoke to. ST owners are keen to expand their machines with power upgrades, such as accelerators and graphics cards.

Falcons and TTs were out in force, demonstrating many high-power applications,

including Linux, the Atari version of UNIX. We also saw vast multiline BBS systems, and excellent new packages such

as *Vision*, the new art program.

A refreshing number of exhibitors were demonstrating new products, both software and hardware. Thanks largely to the efforts of a tireless Nick Harlow (16/32 Systems), many of these new products will soon be available in the UK.



New Generation Software writes BBS software for the TT. Its system features a graphical system editor and supports over 100 simultaneous modem connections.

After ProTOS failed to deliver the Falcon Mark X in person, all eyes turned to the Paris show for our first peek at C-Lab's latest Falcon offering. Unfortunately, the machine didn't make it to Paris either. However, we were told that it was due for UK release at the end of January, through Digital Awareness.

Details are sketchy, but we hear the Mark X has a rectangular case with a separate keyboard and standard 0.25-inch jacks for audio input and output. There is also space in the



The Falcon Mark X failed to make it to the Paris show, despite promises to the contrary. Digital Awareness insists that it does exist, honest.

French ST owners are keen to expand their machines with power upgrades

16/32 SYSTEMS

16/32 Systems was represented by Nick Harlow and shared a stand with Lexicor France. It was displaying an extensive range of CD-ROMs, including the Northern CD-ROM series. This new set of CD-ROMs is made up of 11 disks, all with different themes – including comms, graphics, mono games, colour games, Falcon demos and DTP software.

The discs are aimed at the budget market and cost just £12 each. The only drawback is that they do not provide direct access to their contents – each file has to be selected through a menu program and then copied to your hard drive. Nevertheless, these discs are still excellent value for money.

16/32 secured three definite new releases for UK users. *Vision* (£65) is an art program which works on all STs. It features a bevy of advanced drawing tools and also supports

Fernandez Benoit was pleased as punch with the reaction to his new game, *Sheer Agony*. UK readers can purchase it from 16/32 systems.

large-screen monitors. Watch out for a review next month.

Multibricks (£24) is a new *Breakout* clone for the Falcon, and *Sheer Agony* is a adventure game. It is similar to *7th Guest* and available in both ST and Falcon versions.

Sheer Agony's author, Fernandez Benoit, was eagerly demonstrating the game on both ST and Falcon. The original problems with the English translation have been resolved and copies are now available – see page 30 for a review of the Falcon version.

For more information, contact 16/32 on ☎ 01634 710788.



Nick Harlow of 16/32 Systems had his hands full, as ever, with loads of new Atari goodies.



Sol Barnett of Sunrise Electronics proudly displayed his new Falcon analog converter for use with Falcon Digital Audio applications.



MMS was selling the full Soundpool range of Falcon Audio products, including the FDI and FAS. It also had a selection of MIDI expanders.

housing for the Falcon Digital Interface (FDI).

ST Magazine, the French equivalent of *ST FORMAT*, had a Medusa and an Eagle on show. These two monsters in tower cases really do show what the TOS operating system can do when it's pushed to the limit. The team was also selling copies of the editor's

latest CD of atmospheric music, composed on his faithful Mega ST.

Sunrise Electronics, based in the UK, shared a stand with Digital Awareness in order to display its SE-600 analog converter. The unit duplicates the functions of the Falcon Analog 8, but uses better quality digital-to-analog converters. It is housed in a conventional 19-inch rack mount and has a built-in power supply.

The show was a goldmine of great-value products and enabled visitors to purchase equipment which would otherwise be almost impossible to locate. The organisers have high hopes for next year's show, which should be bigger and better attended. *stf*

OXO CONCEPT

OXO Concept was displaying its latest Falcon and ST upgrades on a large stand. It also sells the new MIDI arranger, *Top Chords* (see the Top Chords panel, right).

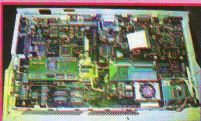
The main hardware add-on from OXO is the CENTURIO 1. It is essentially a Falcon accelerator, but it does a lot more than the other 32MHz boosters: as well as increasing the overall processor speed to 40MHz, it expands the graphics capability to 1600 x 1200 pixels in interlace mode on a multisync monitor. It also increases the operating speed of the FPU (if fitted) and DSP chips to 40MHz and boosts the graphics processor to 50MHz. You can install it yourself – only basic soldering skills are required.

If you think the Turbo1 is fast, watch

out for the upcoming CENTURIO 2, which gives a speed increase to 80MHz on a standard Falcon030.

Other products on show included the Adaptmouse and Adaptkey. The Adaptmouse enables you to attach PC rodents to your ST, while the Adaptkey lets you use a PC keyboard.

Contact Oxo on +00 33 1 48 99 77 23, or browse its Web page at: <http://www.oxo.ch/>.



OXO Concept has a wealth of goodies for your Falcon, including a soon-to-be-released accelerator which speeds your Falcon up to 80MHz!

BEST ELECTRONICS

Whenever there is an Atari show, it's a fairly safe bet that Best Electronics will have a stand. Best stocks an unrivalled range of Atari spares, plus mugs, T-shirts and lapel badges. Many visitors invested in 4160STE badges for their upgraded machines.

Rubber keypads, multiple cartridge-port extensions, Falcon accelerators and a multitude of bits and pieces were also

available. Because these items are usually only sold at shows, Best Electronics always does well, and the warm personality of Brad Koda, who runs the operation, gives any show a boost. By the end of the first day many of the more popular items were sold out, and this was definitely one of the most popular stands. If you're the least bit proud of your ST, watch out for Best at future shows.



Best Electronics always makes an appearance at the major Atari shows. It has a massive range of Atari specific components, and business is always brisk.

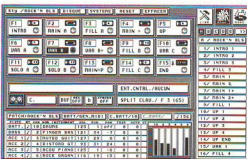
TOP CHORDS

Top Chords is the very latest MIDI arranger to hit the market. Programmed by Jean-Claude Bugnon in assembler and GFA Basic, it represents a huge leap forward in the so-called 'Band-in-a-Box' market.

Unlike many present systems, *Top Chords* enables you to change chords at any time in accompaniment mode – you don't have to wait until the end of a bar. Should you be so inclined, you can also compose complete new rhythm sections, comprising both drum and harmony lines, and

arrange them as you please.

The program works on a number of levels, from real-time keyboard auto-accompaniment through to more serious pattern creation. It also has a custom interface with its own file selector and dialog box system. It is a little fiddly to use at first, but, whatever your level of musical skill, *Top Chords* has much to offer. The English version of the program will be available soon, and rumour has it that a UK supplier has secured the rights to supply the package. More news as we get it.



Top Chords offers new MIDI arrangement and auto-accompaniment facilities and is a revelation for MIDI composers and beginners alike.

Jean-Claude Bugnon, author of *Top Chords*, demonstrated his new software to an interested crowd at the Paris show.



Altered Images

Improve your photos, touch up your scans and create awe-inspiring artwork on your ST and Falcon. Dug Armstrong shows you how in a complete guide to high-end graphics programs.

Image processors enable you to transform images in ways traditional painting and photographic methods couldn't hope to emulate. If you want to enhance your graphics, jazz up your holiday snaps or generally beautify your artwork, you need look no further than your trusty ST or Falcon.

The ST has always been well served in the graphics department, and the last couple of years have seen a welter of exciting new releases. State-of-the-art heavyweights such as *APEX Media*, *Rainbow* and the new *Positive Image* make it easy to achieve stunning results. Even if your machine can't display TrueColour images directly, some of the programs featured here enable you to work on them in memory.

Tempted? Well, thanks to Floppyshop we have a working demo of *Positive Image* on this month's Cover Disk, so fire it up and prepare to flex your creative muscles. You'll need at least 1MByte of memory to try the techniques featured here, but beyond that there are no special requirements – although a hard drive is a definite plus.



Still life

Your ST can be the digital equivalent of a darkroom full of lenses, filters and chemicals. Here's how to harness its power.

By far the most popular use for image processing is the manipulation of still images. Traditionally, this sort of work was carried out by film technicians and graphic artists in darkrooms and studios. Today anyone with a computer and access to some kind of digitiser – a scanner or a video grabber, for example – can do the same. With the right software, you can far exceed the capabilities of manual processing.

But before we look at some of the best programs, let's consider which formats are most suited to the task. All the software discussed in this feature (apart from *Cyber Paint 2*) is able to process 24-bit TrueColour images. Unless you are working with very minimalist hardware, this is the sort of image you should be using. A 24-bit image is close enough to real 'photographic quality' for professional use.

Assigning 24 bits to each pixel enables you to represent 16.7 million colours without a palette and removes most of the restrictions imposed by the

limited colour range of 8-bit (256-colour) paletted pictures. This means that the Targa, JPEG and Tagged Image (TGA, JPG, TIF) formats are the best choice, as they support 24-bit images. Formats such as GIF, PCX and 8-bit TIF are not as suitable, although images in these formats can be converted to a more appropriate file type before you start.

Let's take a look at some of the simpler processing effects supported by *Positive Image* (see panel on page 17) and *Studio Photo*, Compo's GEM-

based retouching software (£49, 01487 773582). Both programs provide full 24-bit editing capability on any Atari with at least 1MByte of RAM.

Bright future

Perhaps the simplest manipulation is to alter the brightness and contrast, either to improve the lighting of a photograph, or to bring out detail and colour in a rendered image. Screen grabs A and B (bottom left, overlaid) show how *Positive Image* can be used to enhance the appearance of a typical family snap.

The right software can far exceed the capabilities of manual processing

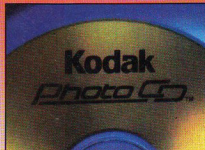
PHOTO CD

PhotoCD is a recent development in home photography. It enables you to get your films scanned and transferred on to CD-ROM.

You can then use the special Kodak PhotoCD player to view your holiday snaps on a standard television, or access them via your CD-ROM drive.

Each print is stored on the disc in a standard format which any double-speed multi-session drive can read. PhotoCDs are an excellent way to get your own photos into an image processing

program, side-stepping the need to scan them yourself. The images are also very good quality (assuming a decent original), and each one comes in a range of sizes to suit most displays. *ImageCopy 4 CD* is probably the best all-round utility for viewing PhotoCD images and converting them into formats other programs will recognise.



If you don't have a scanner, you can use Kodak's Photo-CD service to digitise your photos.

DIGITISING DILEMMA



Exposé, Titan Designs' TrueColour video digitiser for the Falcon.

If you want to digitise images yourself, there are two possibilities. For printed images, such as photographs, a flatbed scanner is the best option. Flatbeds enable you to create 24-bit images of everything from 35mm prints to A4 posters. You might like to check out Epson's GT models, which work well with STs and Falcons if you have System Solutions' GT-Look software (see STF 75 and 77 for details and a review).

If you want to take stills or animated sequences directly from video, your best option is the Exposé video digitiser from Titan

Designs. This clever little box allows Falcon users to grab 24-bit pictures from any video source. You'll also need APEX Media to view and process the results.

The image above was grabbed from a video camera using Exposé, so you can see how good it is. The latest version comes with the FaCAM utility, which displays incoming video in a window. More importantly, it also enables you to capture still images at up to 1024 x 768 pixels and video sequences at up to 512 x 256.

The equipment for digitising images from video is substantially cheaper than a flatbed scanner, but you can't beat a scanner for high-quality still images.

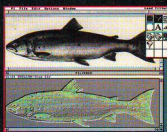


The GT-8500, one of Epson's range of ST-compatible 24-bit scanners.

● Epson GT-8500 scanner with GT-Look 2 and lead, £799
● APEX Media, £99
Titan Designs = 0121 6936669

● Exposé digitiser, £279
● APEX Media, £99
Titan Designs = 0121 6936669

Both contrast and brightness have been increased to highlight the foreground and reveal detail too dark to see. The operation is the digital equivalent of twiddling the brightness and contrast controls on a television or monitor, but the changes are



Positive Image has lots of built-in filters, including this effective Emboss filter, which turns your 2D original into a stamped plaque with a 3D feel.



Another of *Positive Image*'s weird filters, Sharp86, changes colour photos into images which resemble 'scratched wax' drawings.

LOW-COST SOFTWARE

Greyscale Image Processor



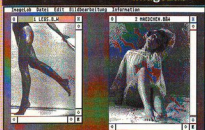
Greyscale Image Processor is a nifty little shareware program which makes light work of processing GIF images for printing. It was written by the author of Positive Image.

Imcom



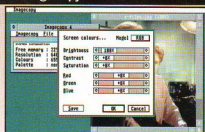
Imcom is a capable processor of 4- and 8-bit images. It runs on all STs, is freeware and can be found on this month's Cover Disk.

ImageLab



ImageLab is a very popular shareware image processor. Unfortunately, all the menus are in German, so some guesswork (or linguistic ability) is required.

ImageCopy



ImageCopy is best known for its image viewing and printing capabilities, but also provides basic processing functions for on-screen images. It's available from FaST Club (☎ 0115 9455250) and costs £39.95.



Studio Photo's colour histogram function with editable equalisation curve. Try saying that with your teeth out!

applied permanently to the image itself. One drawback is that images tend to look somewhat artificial and the colours may change.

Gamma correction is similar in effect, but not a new concept. It is a setting used to improve the the colours in an image, making them match the original subject more closely. Gamma correction is generally used to compensate for view-

ing an image on different VDUs and under different lighting conditions. Screens grabs C and D (opposite page, bottom) show the effect of gamma correction, again using *Positive Image*. Gamma correction is ideal for improving the appearance of images scanned on other computer systems. Both *Positive Image* and *Studio Photo* have built-in

It's nice to know your Atari machine can keep up with the big boys



Studio Photo's Spheris image distortion can give you a hippie's eye view of the Stonehenge Festival. Ah, those were the days...



A Positive Image's brightness/contrast control can be used to improve image clarity. This under-exposed snap can be rescued by increasing both values.



B The resulting image is definitely better, but the colour saturation is poor, creating a harsh, artificial look.

POSITIVE IMAGE

With new software a bit thin on the ground these days, it's encouraging to see the release of *Positive Image*, a powerful new image-processing program.



Positive Image has full 24-bit colour support and one of the best user manuals you'll ever find.

histogram calculators which display the distribution of colours graphically. You can see which colours occupy the darkest and lightest areas, and find out how evenly they are spread. In general, the best contrast is achieved by 'equalising' the points across the range. *Studio Photo* can do this for you.

Well weird

As well as improving the appearance of your pictures, you can also create effects

which are difficult or even impossible to achieve by more traditional methods.

Changing the shape of an image's boundaries and re-mapping it produces startling and sometimes unexpected results. For example, *Studio Photo*'s Spherise function produces a similar effect to a wide-angle fisheye lens. *Positive Image* also has an impressive distortion tool which can 'warp' images along a set of control lines. This process is similar to the mor-

phing effect offered by some animation programs.

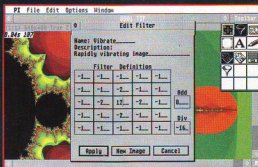
These relatively simple operations show just a few of the benefits of processing your images. It's nice to know that your Atari machine can keep up with the big boys – a 4MByte 5TEM can cope with all these processes.

It is also worth noting that both *Positive Image* and *Studio Photo* are available in 68030 versions for TI and Falcon machines. These can greatly speed up the whole process.

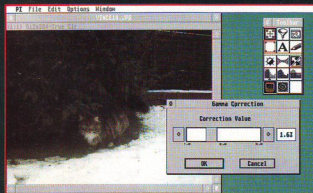
● *Positive Image*, £79.00 (Any 1MByte Atari)
Floppypshop = 01224 586208



Positive Image's Negate function creates a surreal photo-negative of the original image.



If you're not content with *Positive Image*'s built-in filters, you can edit the parameters manually and experiment with different values.

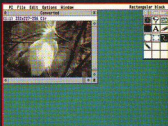


C This scanned picture is dark and murky on our monitor. Gamma correction can improve the scene while retaining the look of the original.



D The resulting image has regained its natural cast, allowing the background detail to emerge. Vince still looks pretty miserable, though.

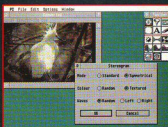
STEREOGRAMS



1 *Positive Image* can create 'foreground enhanced' stereograms. First find an image with prominent foreground graphics.



2 Convert it to 256 colours, then draw an area around the foreground portion of the image using the Bezier block tool.



3 Select the Stereogram tool and use the parameters shown above.



4 Well, the result certainly looks authentic, but since nobody at ST FORMAT can actually see stereograms, it's hard to tell.

RAINBOW



Rainbow's Glamour option makes pixels in the selected colour range glow.

Rainbow 2.05 is the latest version of the Falcon-only TrueColour graphics program from Addition Software. Although billed as a multimedia tool, Rainbow is best at processing and retouching still images. It has some unique features – for example, unlike the GEM-based programs covered elsewhere in this feature, images are presented in full 16-bit colour on a smooth-scrolling display. This means that you can see the results of your work immediately, even if the image is too big for the Falcon's screen.

The Picture Studio offers unusually powerful retouching functions, such as oil-paint brushes, water washes and smears, while the Photo Studio provides some exotic filters and processes images at frightening speeds. Rainbow 2 combines power with a low price and is thoroughly recommended for any Falcon-owning graphics freak.

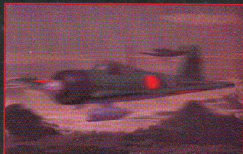
● *Rainbow 2*, £69 – but see offer, opposite (4MByte Falcon required)
JCA Europe Ltd ☎ 01734 452416



The sky's the limit in the Photo Studio.



Cutting out the aircraft as a block roughly isolates it from the background. You can then use Studio Photo's Vitesse module.



After processing, the block is pasted back to complete the effect. The patrol has suddenly become a kamikaze attack.

Special effects

As well as modifying still images, you can apply special effects to animations and digitised video. Hollywood, here we come!

Although most of the GEM-based imaging software is designed for still picture work, there are a few programs which allow a whole sequence to be processed in one go, opening up new possibilities for digitised video and raytraced/rendered animations. This section also showcases some of the new

Falcon-only graphics software, which tosses aside GEM in favour of speed and usability.

Up until now we've been looking at processes which affect the image globally. However, image processing can just as easily be used to change only portions of the image, producing subtler and more specific results. Applying Studio Photo's Mosaic effect to

just a portion of the picture gives a pixellated identity-concealing effect, whereas the Speed Vector filter can be used to simulate motion.

Unfortunately, Studio Photo doesn't allow you to define blocks and alter sections of the image in place. You have to cut a section out, perform the operation and use the Paste On function to overlay it back on to the original.

Be selective

Positive Image makes selective alteration much easier – you simply mark out regular or irregular areas which restrict the effect. This powerful feature also enables you to select

ANIMATION



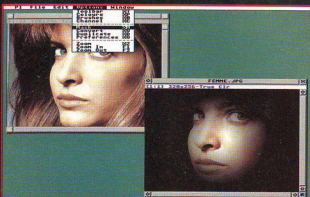
1 APEX Media can process a whole series of frames at once using the Film and Image Filters station.



2 Simply highlight the area to be processed and set the animation button to 'A' for All...



3 ...and the effect, in this case a motion blur, is applied to the whole sequence, frame by frame.



Positive Image's Masking feature hides portions of the underlying image. Here, a Radial mask has been used to create a 'spotlight in the dark' effect.



The Scope mask gives you a binocular view of panoramic images. The blue sky, however, is entirely natural – if a little unlikely.

RAINBOW 2 SPECIAL OFFER

In issue 73 we described *Rainbow 2* as, "An all-singing stunner that really shows off the Falcon. Cheap at twice the price," and gave it an **ST FORMAT** Gold award to boot. Now, thanks to those generous souls at JCA Europe, you can get it for around half the normal price – just £35! You need to hurry, though, because this offer is only valid until 15 April 1995.

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a complex shape from an image for cutting, copying, pasting and masking.

Pin-sharp

At the lowest level, you will often have to edit individual pixels to make small but telling changes to your images. For example, *Studio Photo*'s Sharpen tool can be used to bring out more detail in a 3D rendered image. This process highlights sudden changes of colour between pixels, thus revealing object edges, and is 'painted' on with a brush-like tool.

Most image-editing

Image processing can just as easily be used to change only part of the image

programs have Sharpen and Blur tools. They are directly related to the High and Low Pass filters, which enhance or blend coloured boundaries across the whole image.

As well as altering pixels, you can alter individual colour components with *Positive Image*'s channel display, which shows the red, green and blue colour planes separately. The image window shows only the current plane, and edits made to the picture only affect pixels which contain that colour. Needless to say, you need a firm grasp of colour theory to make the most of this feature.

Animations

ST owners could do a lot worse than use *Cyber Paint* for processing animations. Although old, this 16-colour low-resolution marvel still has a credible crop of features, and it's ideal for taring up

sequences made from *Degas* or *NeoChrome* images. Any of the options under the Pixel f/x menu item can be applied to a single frame, segment or the entire sequence with just a couple of mouse strokes.

Anti-Alias for example, removes jaggy edges and gives the subject a smoother and more rounded appearance. Unrez does exactly the opposite, producing a blocky, posterised sequence.

ANIMATION EFFECTS



TrueColour morphing, one of *APEX Media*'s most powerful features.

With its ability to process entire sequences of TrueColour images, *APEX Media* makes it very easy to add effects to animations. In addition to basic motion and de-jag filters, it has a number of unique functions which can totally transform the most boring of images. The Morphing studio enables you to make portions of a picture distort and re-form into other images, while the Analog

Masking tool can exclude unwanted background details and restrict processing to certain colour ranges and properties.

Alas, ST users can't run *APEX*, but don't be disheartened. *Cyber Paint* – one of the *Cyber Studio* programs – is a very capable processor of 16-colour animations. It has some great features, including an interface which was the blueprint for both *APEX* and the *Autodesk Animator* software for PC systems. Both *Degas* and *NeoChrome* image formats are supported, as well as DLT and SEQ animations, and the program's age means that it is now very good value for money.

● *APEX Media*, £99 (Falcon only)
Titan Designs ☎ 0121 693 6669

● *Cyber Paint*, £25 (ST/STE only)
16/32 Systems ☎ 01634 710788



Protect the identity of your less respectable associates with *Studio Photo*'s Mosaic effect.



The Stained Glass mask gives you a monk's-eye view of your images. It works best with vividly coloured pictures, such as this still life.



A simple gradient blend mask simulates shadows round the base of a mountain, enabling you, for example, to put white text over the bottom of the image.



Studio Photo's Sharpen tool is great for adding a hard edge to your 3D creations.

ANIMATION



1 Cyber Paint 2.0 provides animation image processing on the ST. Here, we're trying to improve the 'jaggy' look of the sequence.



2 Any of the built-in filters can be applied across all or part of the animation with just a couple of mouse strokes.



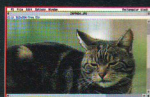
3 In this case, the Anti-Alias filter has been used to smooth out the jaggy lines and reduce the blocky 'staircase' effect.

◆ **APEX Media** does much the same things on Falcon machines, but can work on TrueColour pictures. Besides the Film and Image filters mentioned in the Animation Effects panel (page 19), it also provides Analog Masking, enabling you to protect or expose parts of an image. You specify the areas to be masked by inputting colour ranges based on hue, saturation and brightness.

Although a bit difficult to understand, this function facilitates some impressive effects, such as replacing one set of colours with another. For example, you could change the colour of a leopard's spots without affecting the rest of the picture. When you consider this type of effect can be applied to a whole series of frames automatically, you can start to appreciate **APEX Media's** potential.

And finally...

We hope you've enjoyed this brief whirlwind tour round the world of image processing on the ST. Now that you've got a bit of background, why not fire up the **Positive Image** demo on the Cover Disk and try some effects for yourself? *stf*



Positive Image's Bezier block tool enables you to define complex areas.



You can also edit the three colour channels independently.

LOOK AT IT THIS WAY

When you're processing images, it makes sense to have as good a screen display as possible, both in terms of number of colours and resolution. It's handy to be able to see the results of your labours immediately, and it's certainly more pleasing to the eye. As ever, though, there is a trade-off between screen quality and machine memory. Sometimes a small, memory-efficient display is all you need to apply an effect.

On a standard ST, you are limited by the quality of your display. However, even if you only have a 1MBYTE STFM, you can still use **Positive Image** to edit images in high or medium res, then output the results as TARGA pictures and view them with the **APEX Targa** viewer. The ST's low-res 16-colour display is also good enough for greyscale work, especially if you have the extended palette and Blitter of the STE.

Moving up the scale, Falcon and TT machines provide both the processing power and on-screen colours required by the more serious user. Falcon owners should use a VGA display for high resolution 8-bit (256-colour) work, and an RGB monitor or television for TrueColour editing.

Screen enhancers are also



In ST low resolution, **Positive Image** differs images down to 16 colours. However, editing is carried out on a 24-bit representation in memory.



The Falcon's TrueColour display offers a much better representation of a 24-bit image. However, TrueColour images eat up memory at a terrifying rate.

very useful. Most of the software mentioned in this feature supports GEM-compatible graphics expanders, such as the Matrix TC1208e for the ST range, and the BlowUp030 and ScreenBlaster utilities on the Falcon. These handy expansions use various techniques to boost colour depth and screen size beyond the standard settings.

Falcon owners should also look out for the **APEX Image** viewers, which can provide a genuine 24-bit display.



1 Rainbow can be used to apply photographic filter effects with a simple drawing tool. First, load your image and position it in the viewing window.



2 Now, right-click on the Shape tool and set the parameters as shown above. We're going to make our cat of the month a little more colourful...



3 A transparent layer is added. It fades from one end of the colour definition window to the other, creating a rainbow-coloured haze over the picture.

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STrip Cartoon

Ever fancied creating your own Andy Capp or Judge Dredd epics? Now you can, thanks to FaST Club's new comic strip program...

As we revealed in our Comic Capers feature in issue 77, creating cartoons and comic strips on your ST can be both rewarding and fun. If you have the patience, you can put together your artistic doodles with almost any DTP program. Given the complexity of some packages, though, it's a bit like using an elephant gun to rid yourself of a pesky fly.

Enter IEBC Design, which has developed a program dedicated to this very task: *STrip Cartoon*. It provides all the tools you need to compile your drawings into a smart-looking cartoon.

STrip Cartoon is very specialised, and not without limitations, but it knows exactly what it has to do and isn't over-engineered with unnecessary bells and whistles.

Presidential suite

The program is almost a mini-DTP suite, geared up for a specific job. It doesn't offer anything more than the most rudimentary drawing tools

(for creating frames, curves, lines and specialised shapes, such as speech bubbles), so you need a separate art package to create your artwork.

STrip Cartoon uses a system of 'libraries' – files which hold several pieces of art. Adding an image to your cartoon is simple – just select it with a mouse click and place it on the page. The libraries are held in the program's own BIB format – if you've used

IEBC's *Pablo Paint* from Cover Disk 70, you'll recognise this extension. The easiest way to create a library is to use the mono version of *Pablo*.

It isn't a problem if you don't have *Pablo*, though, because *STrip Cartoon* provides a small utility for chopping *Degas* P13 images into sections, which you can then use to build a library. It's a bit fussy, however, and it would be better to be able to load small images in a common file format, such as IMG, without

having to fiddle with libraries first. You can load images one at a time in the BLK format used by *Pablo* and others, but you need to save each image first, otherwise you have to quit and convert them.

Image formats aside, *STrip*



(C) Claude BOULANGER - IEBC

Cartoon works smoothly, and although it isn't GEM-based, it has a GEM-like interface. The menus are pull-down affairs like those used on the Mac, rather than the ST's traditional drop-down style, and you can't access Desk Accessories from within the program. It also features the same unwieldy file selector as *Pablo*. To make matters worse, it won't let you run alternative file selectors, such as *Freedom* or *Selectric*, so you're stuck with the one it provides. On the other hand, the clear icon bar at the top of the screen makes using all the program's major tools and functions easy.

Once you've designed the

basic frames of a strip and your artwork is in place, it's time to add speech bubbles and text. As well as drop-

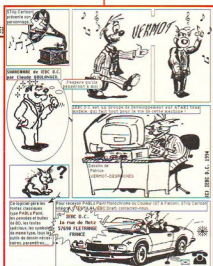
ping text straight on to the page, *STrip Cartoon* provides a clever text styling tool. Once you've typed some text into the dialog box, you can distort it using perspective effects or twist it into unusual shapes. The results can then be placed on the page.

Pow! Thwack!

STrip Cartoon also enables you to print out your creations – if you have a 24-pin dot matrix printer, that is. This is the only printer type currently supported, although the manual does suggest a work-around for other printers. The 24-pin driver produces crisp print-outs, but it's slower than watching hair grow. IEBC Design needs to put in some hefty work on the printer routines before the next upgrade.

STrip Cartoon is a great bit of software. The lack of true

Author Claude Boulanger has clearly spent a lot of time giving *STrip Cartoon* a friendly, easy-to-use feel. That time wasn't wasted.



With a little practice and some careful design, you can produce some very eye-catching cartoons!

GEM support and the scrappy printer routines are a hindrance, but it's fun to use and does produce reasonable results. It's also the only program of its type. If you're keen to see your cartoons realised and can live with the printer hassles, it's a worthwhile investment. stf

FRANK CHARLTON

Product: *STrip Cartoon*

Price: £14.95

Contact: FaST Club

Tel: 0115 9455250

Min System: ST/TT/Falcon, high res monochrome monitor (or Sebra emulator), 1MByte RAM.

STrip Cartoon

HIGHS

- A doddle to use
- Excellent value
- Produces good results

LOWS

- Lousy printer routines
- Fiddly library system

In short...

A great budget buy for budding cartoonists – clean, simple and fun to use.

73%



Cartoons occupy an area twice the height of the screen, but *STrip Cartoon* scrolls smoothly, so this shouldn't cause problems.

Time Talk

If the thought of complex maths makes you shudder, fear not – now there's a program to do those tricky musical calculations for you.

Time Talk links the maths of music to the maths of computing, enabling you to convert your musical inspiration into the numbers your ST requires.

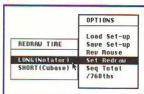
The Accessory may look baffling on your monitor, but the manual explains exactly what functions are available and how to use them. It is written by a musician for musicians, rather than from an overly technical point of view, and makes frequent and exhaustive use of examples.

Time Talk is clearly divided into three sections, each of which addresses a distinct area of digital time conversion.

Delay

If you use a digital delay line (DDL), you will know how difficult it is to get the delay properly in time with your music. Time Talk's Delay page enables you to get your delays spot on, first time.

For example, suppose you are working with a piece of music at 179bpm in 4/4 time and want your delay repeats to fall exactly on the beat. Time Talk reveals that you must set your delay to 335.2 milliseconds (most DDLs describe their delay times in milliseconds).



Time Talk has specific settings for both Notator and Cubase.

Time stretching

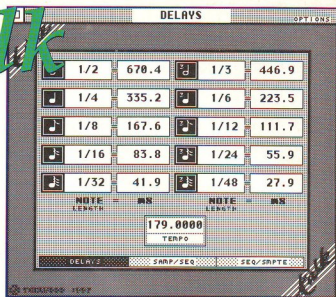
The second page will be very handy if you use a well-known brand of sampler. All the Roland and Akai samplers are supported specifically, as are several others.

The use of samples in record production is now widespread, even beyond the world of rave and dance music.

With a multitude of sample CDs now available, it is important to be able to fit the samples with your music as neatly as possible.

A common requirement is the detuning of drum samples to fit the speed of your song. For example, you may have a perfect two-bar loop, but it's just too fast. Your sample CD will tell you the speed of the

Time Talk will tell you exactly what percentage detune you need



Time Talk's easy-to-use Delay page ensures that your delays fit the music perfectly.

drums; all you have to do is enter that speed, plus the bpm of your song. Time Talk will promptly tell you exactly what percentage detune you need. The calculations for time stretching are performed with equal ease.

SMPTE

The third page is so specialised that you can even save £30 on the cost of Time Talk by pur-

chasing a version without it. If you don't work extensively with video and audio SMPTE time-code, you might want to consider the cheaper option.

If you are working with video, you'll often need your music to synchronise with the action on screen. Time Talk enables you to set a time (on the SMPTE counter) when your music must reach a certain point. It then returns the

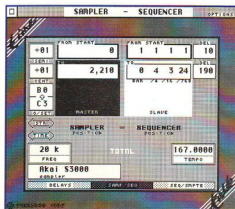
tempo required for that particular section of music. Put simply, if eight bars of music have to cover twenty seconds, Time Talk will tell you exactly what tempo you require.

And finally...

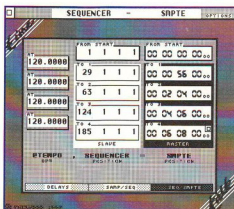
One thing Time Talk lacks is a tempo 'tap-in' feature. If you don't know the tempo of a piece of music, it is handy to be able to hit a key in time with the music and see a read-out of the bpm. Because it lacks this feature, the program relies heavily on you knowing the tempo of your samples.

Overall, however, it is an excellent program that executes complicated calculations in near-perfect fashion. *sf*

ANDY CURTIS



Time Talk tells you exactly how to adapt your samples to fit the tempo of your song.



If you work with SMPTE time-code on video, this page enables you to set effective tempos so the music fits the pictures.

Product: Time Talk
From: Aleph Software
Contact: PO Box 3083,
London N1 8NZ
Price: £79 (£49 without SMPTE)
Machine: ST, high resolution

Time Talk

HIGHS

- Clear manual
- Easy to use
- Powerful features

LOWS

- No 'tap tempo' facility

In short...

Powerful and versatile, Time Talk does the maths so you can think about the music.

89%

Textstyle 1.1

Want to re-style your text? You need *Textstyle*, the text-styling program that, erm... re-styles your text, very stylishly.

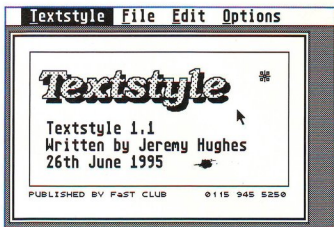
Textstyle makes it easy to create jazzy text headlines. You can get it for nothing by buying *Imagecopy 4* (STF 75, 94%), but it's also available as a standalone product, so let's take a closer look.

Textstyle 1 was first reviewed in issue 57, where it scored 80%. The new version is supplied on a double-sided disk with a printed manual and runs on any Atari, in all resolutions. It's useful for producing headlines, logos or any

other text-based artwork, even if you have DTP software.

It's easy to use: enter text into the GEM window, then use the various menus options to re-style your words in any *Calamus* or GEM font. Add background shading, shadows, outlines and fills to taste, then save the result to disk in IMG or TIFF format. You can then import the logo into your regular DTP package.

At first glance there don't seem to be huge differences between the original *Textstyle*



If you also need an image viewer, take a look at this: FaST Club is offering *Textstyle 1.1* plus *Imagecopy 2* for the special *ST FORMAT* readers' price of just £24.95.

and version 1.1, but the latest release does provide some important improvements.

Cohabitation

One criticism of the first version was that you couldn't print from it. This has been partly resolved - *Textstyle* now prints via *Imagecopy* if version 3.54 or higher has been loaded as an Accessory. You will need a 1MByte machine to use this feature, though, because *Imagecopy 4* and *Textstyle* need plenty of RAM to co-exist.

Textstyle's dialogs now use

[Alternate] keys as shortcuts, for compatibility with *Imagecopy* and many other ST programs, making operations easier. Another improvement is that *Textstyle 1.1* allows you to insert line breaks when you enter or import text.

To conserve disk space, the Save image dialog has an Adjust image size option which enables you to remove unnecessary white space. The Contour and Outline shadow styling effects have been improved, and it incorporates many minor bug fixes.

The new features certainly make *Textstyle* a better, more useful program. *stf*

PETER CRUSH

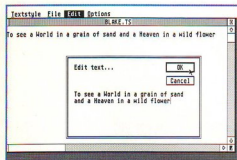
FONTS

Lettering can be any size from 0.1 to 999.9 points (72-point lettering is about an inch high).

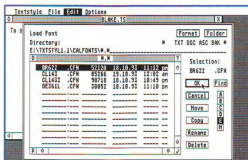
The *Calamus* fonts Brush, Clarendon (Century Schoolbook), Clarendon Italic and Geometric are supplied with *Textstyle*. Other fonts are available from The FaST

Club - a catalogue costs £2.95.

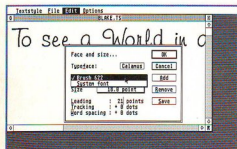
You also get several GEM fonts: 300dpi Bookman, Bookman Italic, Century and Century Italic, American Uncial and monospaced fonts. Additional GEM fonts are available from both PD and commercial sources.



1 Enter your text direct from the keyboard or load it from disk, then use the Style menu to load a new font.



2 A selection of *Calamus* and GEM fonts is supplied. To load a particular font, simply use the file selector to load it.



3 You can easily change the height of the letters. Various styles and fills can also be applied to the text.



4 Many subtle adjustments are possible - you can set the exact slope of italic text, for example. Changes appear immediately.

Product: *Textstyle 1.1*
Price: £19.95
Contact: FaST Club
Tel: 0115 9455250
Min system: Any Atari

Textstyle 1.1

HIGHS

- Very fast, easy to use
- Lots of possibilities

LOWS

- Can't warp, shape or stretch text

In short...

Great for producing fancy headlines quickly, without using art or DTP software.

88%

VERDICT • STF-VERDICT • STF-VERDICT • STF-VERDICT • STF-VERDICT

NameNet 4

Bin your paper address book and join the data revolution – we investigate the latest way to store contact details on your ST.

If there's one thing your ST is good at, it's keeping track of large quantities of data. A well-designed address manager enables you to keep all of your contact details at hand without the embarrassment of owning a Filofax. More importantly, you can use your ST's computing power to sort and process them effectively.

NameNet 4 is the latest release of Roger Derry's much admired address manager program. It's more than a minor upgrade, though – this version includes the extra features previously only available in NameNet Professional 3, sold commercially for £40. While less powerful versions have always been available as shareware, this release is the first to give you the high-end features for a very reasonable £15.

Address book

Although it uses the familiar GEM interface, NameNet's massive collection of options can be off-putting at first. However, there is some superb programming tucked away, so it's worth sticking with.

Essentially, NameNet holds the address data in a card index format, with each record having its own card. You'll

need to begin by spending some time entering all your records. As always, it's a slog tapping in a large collection of addresses, but once this is done you'll only need to update it with new entries.

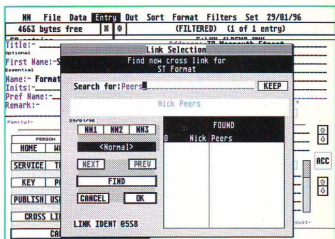
The simplest way to find an address – presuming you know the beginning of the name you're hunting for – is to start typing. NameNet catches your keystrokes, and displays the closest match from your datafile. The useful filters are a little intimidating at first, but can be mastered with practice.

Linking

NameNet's biggest leap away from the normal card index format is its superb system of dynamic linking. You can link up entries that

have something in common, resulting in a free-form database which almost has a hypertext feel to it. A simple example would be to link together all your entries for ST-owning friends. When you access one of them, the rest are just a few mouse-clicks away. Indeed, the Falcon FacT File

The linking system is excellent, and makes NameNet a very powerful tool.



The powerful linking system is easy to get used to. It creates hypertext-like links between related items and lifts NameNet way above the average address manager.

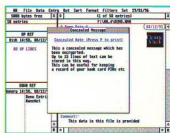
uses NameNet to provide a searchable database of its members. This way, users can easily find fellow FacT Files with similar hardware, software and interests. The linking system is excellent, and makes NameNet a very powerful tool.

NameNet also provides options for outputting records to a wide range of printers, and can dial telephone numbers for you if you have a modem

attached. It's even clever enough to withhold your number from BT's Caller Return system by dialling 141, if you so require.

Good, or bad?

NameNet is vastly powerful, and stands tall over any other address manager we've seen for the ST. The interface is a little confusing at first, but practise soon reveals its strengths. The initial amount of effort required may put off the casual user, but if you use

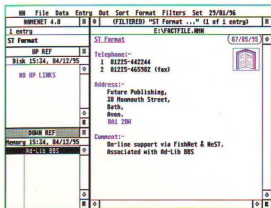


Notes can be attached to entries, and locked with a password – handy for hiding sensitive details from prying eyes.

your ST to store lists of contacts and addresses, you'll find it hard to beat NameNet. *stf*

FRANK CHARLTON

Product: NameNet 4
Price: £15 (upgrades £5)
Contact: Roger Derry, 38 Leopold Road, Bristol, BS6 5BS.
E-mail: rderry@cix.compulink.co.uk
Min system: All 1MByte Atari



In this example from the Falcon FacT File's database, the entry for ST FORMAT reveals a link to AdLib BBS.

DEMO VERSION

An demo version is also available. Without the registration key, it will save a maximum of 65 entries, and some of the more powerful functions are disabled. You can pick up the demo from on-line sources such as CIX and AdLib, as well as the usual PD libraries. Ordering direct from Roger costs £3, which is credited against the cost of registering for the full version later.

NameNet 4

HIGHS

- Excellent linking system
- Very comprehensive

LOWS

- Slow data entry at first
- Potentially confusing for beginners

In short...

An immensely powerful and comprehensive system for managing contact lists.

82%

VERDICT • ST-VERDICT • ST-VERDICT

LaserJet 5L

Double for nothing: the LaserJet 5L produces pin-sharp 600dpi printouts, but costs little more than a standard 300dpi model.



Courier
Courier Bd
Courier It
Courier Bd It
Letter Gothic Bd
Letter Gothic It
CO Times
CO Times Bd

CO Times It
CO Times Bd It
Courier Bd It
Univers Md
Univers Bd
Univers Md It
Univers Bd It
Univers Md It
Univers Bd It

Univers Md It
Univers Bd It
Antique Olive Bd
Antique Olive It
Antiqua Md
Alberus Xbd
Wingdings c/s & SDR

The 5L's built-in test page illustrates its impressive capabilities and attractive scalable fonts.

Look around any office, and chances are you'll see a Hewlett Packard LaserJet printer. HP almost single-handedly defined laser printer standards, and it's the company others follow. Although prices have dropped dramatically, HP's lasers have always been in the mid to high price range, so when we heard about its new low-cost printer, we were keen to try it out.

15-minute warning

HP says the new printer can be made operational in just 15

minutes, a claim we just had to check out. It's pretty easy to set up: you don't have to assemble much and the printer is almost ready when you take it out of the box. Slot in the toner cartridge, then connect up the power via the mains cable.

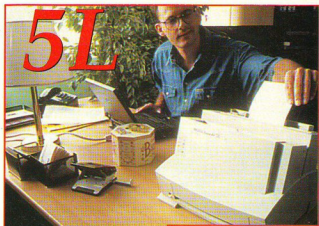
The printer also has to be connected to your ST's parallel port – if you don't already

have a Centronics printer lead, you'll need to purchase one separately.

Next, load your stack of paper into the slot on the top of the machine. A built-in guide slides up to give extra support to the 100 sheets it can accommodate.

There's no power switch – the printer is always 'on' – and there's only one push-button on the little machine, plus three coloured LEDs that illuminate or flash in various combinations.

The 5L warms up very quickly, and within seconds a single green light informs you the printer



HP's low-cost LaserJet 5L prints at 600dpi.

is ready. It hasn't even taken five minutes to set things up, so we won't be referring HP's claim to the Advertising Standards Authority.

Come in close

The 5L is the latest model in the LaserJet 5 series, which also includes the more costly LaserJet 5 and LaserJet 5P. It's the baby of the family and surprisingly tiny – with the paper guides folded down, it takes

up barely more than a cubic foot of space. It doesn't look much like HP's previous printers, either – it's more like a scale model of

a futuristic building.

The ST Format Test Page, 60 lines of text printed out from *Protext*, looked really good at 600dpi and only took 30 seconds to print. *Protext* users can select any of the printer's 26 fonts, at any sensible point size.

Pro printing

The 5L does equally well with graphical pages. It took just two minutes and 20 seconds to print a *PageStream* advertising flyer containing a range of text styles and fonts, and the quality was almost comparable to professional printing.

Finally, we used graphics utility *Imagecopy 4* to print postcard-sized pictures. They

Come to our Victorian

Christmas Bazaar

Saturday 2nd Dec 1995, 11am - 3pm
Catholic Church Hall, Mill Lane, Dunmow

Admission Free. Fun for all the family!

Packed out with Attractions & Stalls including

GRAND PRIZE DRAW • CHRISTMAS CRAFT STALL
JEWELLERY • CHRISTMAS WREATHS • KAFFER
TOMBOLA • CASH STALL • LUCKY DIP • BOOK STALL
TREASURE HUNT • TOYS • RINGONES • GROCERIES
COMPUTER GAMES ARCADE • RANCY GAMES
STATIONERY STALL • TABLE DECORATIONS
TREE DECORATIONS • BOTTLE STALL • REPOSITORY
TRADITIONAL FOODS • RUSTIC CHRISTMAS
CHRISTMAS CARDS • GIFT STALLS • SNACKS • BOLLAS
HOT MINCE PIES & MULLIED WINE • TEAS & COFFEES
With all stalls/draws donated to Victorian causes

WIN CHRISTMAS PRESENTS!

Come along to guess and you could be the winner of an extra mystery prize! One entry to this additional draw when making any purchase. The Grand Draw of £250 cash prizes and many other prizes to be made at end of event. See you there!

This *PageStream* flyer took only two minutes and 20 seconds to print.

were output quickly and the quality was great.

Overall, the LaserJet 5L is a great little printer at a very reasonable price. Buy with confidence. *stf*

PETER CRUSH

Product: LaserJet 5L

Price: £425

Contact: Hewlett Packard

Tel: 01344 369222

Min system: Any Atari, requires parallel printer cable



The 5L copes well with difficult pictures, such as these geraniums. Edges are sharp and the greys are smooth.

SPECIFICATIONS

Size: 13.2 inches wide, 12.3 inches deep, 9 inches high (15 inches with sheetfeeder extended)
Weight: 15.7lbs with cartridge installed
Print speed: Four pages per minute
Print resolution: 600 dots per inch

Power consumption: 100W printing, 6W standby
Memory: 1MByte RAM and 2MByte ROM on board
Ozone emission: Below measurable limits
Fonts: 26 scalable TrueType fonts
Media handling: Sheetfeeder takes 100 pages

VERDICT • ST/VERDICT • ST/VERDICT • ST/VERDICT

LaserJet 5L

HIGHS

- High-quality output
- Easy paper adjustment
- Very small
- No noise

LOWS

- Only controllable via software

In short...

You won't get better output from any other laser printer in this price bracket.

91%

European Champions

Given the ever-present threat of football hooliganism, you might like to consider a more passive, stay-at-home approach...



You can set tactics for individual zones as well as pitch events (kick off, etc).

European Champions looks spookily like a footy management sim, but looks aren't everything. Although there are menus galore, enabling you to adjust player tactics, game options and fixtures, it is, in essence, a football game simulation. There's more to it than kicking a ball around, though.



European Champions gives you total control over the type of pitch, style of play, etc.

For a start, you don't really have a specific team. Although you can choose to follow just one side through the Premier League or European Cup you could, in theory, play every single game as every single

team, or play against a friend in the guise of those teams.

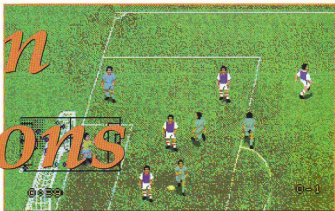
Before you run out on to the pitch to grind your opponents into the dirt, you get the chance to set up all sorts of things. There are the computer-specific details, such as match length – from four minutes to the full 90 – and cursor and control system. There's also a handy 'temperament' option which enables you to choose anything from a lenient, semi-blind ref to a keen ball-Nazi.

Ready salted

There are four ready-programmed strategic plans, plus two spaces for your own. The level of control over your players is excellent – you can



The default mode displays the game from overhead, providing the clearest idea of what's actually going on.



The view from the side is aesthetically pleasing, if a little confusing at times.

define tactics for attacking, defending, taking corners, kicking off and hanging around the various zones the pitch has been divided into. It's rare that a computer footballer will let you tweak your style to this degree.

Salt and vinegar

Once the planning is over, the crowd seated and the players prepped, the match begins. The action on the pitch is por-

trayed from two viewing perspectives, and pitch conditions change visibly, affecting the handling of the ball. Better vet.

the strategies you planned earlier actually come into effect.

However, despite the impressive presentation, the game suffers in playability terms. As with all football games, the ball stops and the relevant player runs towards it, stopping when he reaches it. You always control the player nearest to the ball, and can either dribble around or hit fire to kick. Getting the ball too close to another player switches your control to them, probably sending them running off in a different direction. This is a feature common

to all football games, however.

What isn't as common is the computer modifying your kicks when you aim the ball. Instead of rolling in the direction you're facing, it flies off towards the best target – another player, the goal, or a gap that another player can run to. Players sometimes do phenomenally stupid things against your wishes, which can be a little irritating.

Roast chicken

Someone must have spent a lot of time on this game – it's one of the most comprehensive, involving footie sims to date. Unfortunately, the flaws in the game engine make it a bit of a failure. The computer ought to let you make the decisions when you're playing the game.

European Champions is a game full of the things *Team* should have had, but it lacks *Team's* playability to the point of irritation. Damn, *stf*

DAVE BARRINGTON

Product: European Champions

Price: £12

Contact: 16/32 Systems

Tel: 01634 710788

Min system: All 1MByte STs

European Champions

HIGHS

- Wonderful front end
- In-depth tactical play

LOWS

- Computer interference

In short...

A tad more playtesting
and this could have been a
great
football
game... **69%**

69%



Yah boo sucks to Coventry – its manager might as well be a computer. Erm, its manager is a computer. Ah well.

Confusion

Wing Commander? Doom? Myst? A magical, colourful, mystery game? Nope, it's another puzzler with half a ton of Falcon 'enhancements'.

What is it with Falcon programmers lately? Last month we reviewed *Platonix*, a Falcon-only puzzle game with lovely graphics and music, but very limited gameplay. This month we have another contender in the 'let's revamp an old game for the Falcon' stakes...

Confusion is the latest release from the wonderfully named Willi B Werk Gameline. You need about 4MByte of free hard disk space and a basic grasp of German to install the game. German? Yes, thanks to an error in the manual you need to unravel the German README file to work out what to do. You see, the manual tells you to insert disk one and run *INSTALL.PR*. This would be fine, except *INSTALL.PR* doesn't exist. Essentially, you need to create a folder on your hard drive called *CONFUSION.WBW* and copy the contents of all three disks into it.

Tonight's television

Confusion runs on television sets and RGB and VGA monitors. Unfortunately, like *Platonix* last month, it doesn't offer true VGA compatibility. Instead, it switches a VGA monitor to a lower screen

frequency that some older VGA models can't cope with. Ours didn't, certainly.

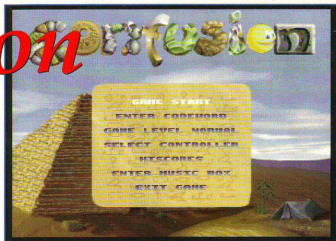
Confusion is based on a very simple idea. Remember the old *Soko-Ban* game, where your little character navigates a 2D maze, pushing blocks around to complete a level? Yep, that's basically it.

Plot development

However, it's all wrapped up in the most convoluted attempt at a plot we've ever seen. You're an archaeologist, back in 1917, attempting to penetrate the pyramids of Egypt, and you've discovered that pushing certain stones and crystals opens up new paths. Having been woken by a mysterious voice you end up being hypnotised and led into the pyramid. As the entrance closes, you hear only a hollow laugh... And all this for a game where you shove little square blocks about? Sheesh!

And so, the game. The opening levels are very basic. Your small character stands in a stone-block maze, which is viewed from above. To complete the level, you need to push blue crystals (which are curiously the same big square shape as everything else, including

Hmm. Blue blocks, red blocks. Where have I seen this before?



It's nice to see that the artist pushed the Falcon's capabilities in some way. That logo must have taken absolutely ages to do.



Confusion is all about moving blue blocks around so they become red.

yourself on to small activation stones. This turns them red.

You need to devise a strategy before you start, though, because the crystals often need to be triggered in a set order - tripping one too early will block a vital path, and you'll be stuck.

There's a time-limit to cope with, and on later levels you'll come up against other obstacles, such as colour-coded stone doors which can only be opened with scarabs.

Pyramid of tedium

Like *Platonix*, *Confusion*'s front-end promises a lot with its superbly drawn 256-colour graphics and lively stereo sound, but ultimately it fails to deliver the goods. To be honest, the menu properly pushes the Falcon harder than the game itself - there's even a jukebox mode where you can listen to any of the tunes.

While the *Soko-Ban* concept can be infuriatingly addictive, the swish graphics and music do little to disguise the fact that *Confusion* is an 8-bit game at heart. Strip away the funky tunes and colourful intro screens and you're left with a game which wouldn't



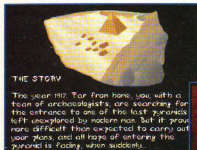
Later levels introduce some extra elements to try and spruce it up.

even make an ST sweat, let alone a powerful puppy like the Falcon.

Some of the level designs are devious, and there's certainly more of a puzzle element here than in *Platonix*, but it's still a game more suited to the shareware market. If you're after something fresh and original, or even something that takes advantage of your Falcon's hardware, you'll be sadly disappointed. *stf*

FRANK CHARLTON

Product: *Confusion*
Price: £24
Contact: 16/32 Systems
Tel: 01634 710788
Min System: Falcon, 4MByte RAM,
4MByte of free hard drive space



THE STORY

The year 1917. Far from home, you, with a team of archaeologists, are searching for the entrance to one of the last pyramids left unexplored by modern man. But it proves more difficult than expected to carry out your plans, and all hope of entering the pyramid is fading, when suddenly...

Why is it that simple puzzle games like this one require elaborate plots to make them seem far deeper than they actually are?

VERDICT • STIF VERDICT • STIF VERDICT

Confusion

HIGHS

- Lovely static screens
- Stomping music

LOWS

- Very basic gameplay

In short...

Lovely graphics, but nothing special on the gameplay front. It's *Soko-Ban* - again.

55%

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Epson LQ400/500/800/950	3.45	3.30	3.10	2.90	Star LC24-10/200/100/150/109/15	3.14	2.99	2.79	2.59
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Epson FX800/3100/FX800	3.36	3.21	3.01	2.81	1off	2x	5x	10x	
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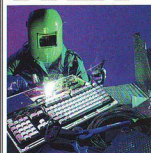
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"This time, we'll get it right," sang the England

Readers with long memories might recall Arc, Atari's one-time software publishing arm. No prizes for that, but award yourself a pat on the



There are better conversions of *Defender* on the ST. Try *Anarchy*, for example.



Here's an idea for Atari: try releasing an original game. Shocking thought, eh?

This time, again, there are three games in the package, so let's waste no more time and take a look at each one in turn.

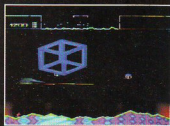
This is a terrible conversion. It's astonishingly easy and the enemies exhibit almost none of the characteristics of their coin-op counterparts. The previously-lethal Swarmers are dim-witted cannon fodder, while the supremely evasive Mutants charge straight into your laser fire without blinking. Also, although there's a perfectly good fire button unused, the Hyperspace



Defender 2000: bright colourful graphics, blistering animation. Pity it's rubbish



"My party trick is to surround my ship with a green hoop of energy."



Defender Plus is probably the best of the three versions included in **Defender 2000**.

enemies make for a fast and pretty addictive blast, albeit one that you have to play almost entirely by radar.

Here's where it all goes really wrong. The graphics are huge, and to fit them in the game has been adapted to include vertical as well as horizontal scrolling. As a five-year-old could tell you, this is a ridiculously stupid idea in a game based entirely on protecting little blokes walking along on the ground. How can you protect what you can't see?

The error is compounded by the absurdly over-the-top graphics. Bright, over-detailed backdrops and eye-melting weaponry pyrotechnics serve to almost totally obscure anything you could actually see in the first place – the whole

Dig out your old
ST and play
Psygnosis' brilliant
Anarchy instead

thing moves stupidly fast in a confusing blur of colour. That said, we cleared 30-odd levels first time round, although we have little idea how.

Defender 2000 does everything that could possibly have been done wrong in an update of *Defender*, wrong. You'd be better to dig out your old ST and play Psygnosis' brilliant *Anarchy* instead. *stf*

STUART CAMPBELL

Product: Defender 2000
Price: £49.99
Contact: Atari
Tel: 01753 533344
Min system: Jaguar

T • STF Defender 2000

HIGHS

- Three different games
- Defender Plus is quite addictive

LOWS

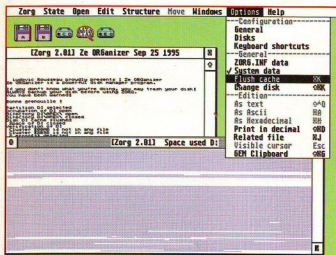
- You can't see what's going on...
- ...but it's still much too easy

In short...

Jeff Minter makes a total mess of *Defender* – again. Let it go, Jeff, please. **31%**

PD & Shareware

Nick Peers keeps one eye on the PD and shareware scene and the other on the post, just in case he gets a Valentine's card.



Zorg on the Falcon. Those colours are very appealing, but it seems we need to find some more space on our hard drive pretty quickly.

Zorg 2.01

LAPD, Disk U80
Ali Ataris

Zorg is an impressive file and drive monitor which enables you to examine your files, folders and drives. When used correctly, with your disks and drives backed up first, Zorg makes it easy to keep an eye on the state of your drives and run them at an optimum level.

One of the quickest ways to improve your hard drive's performance is to defragment it. Unfortunately, you'll have to register Zorg before you can do this, although you can find

out how fragmented your drives are. UK registration through CyberStrider costs £12.

Other functions include the ability to display a drive's free space graphically and load and examine disk sectors (again, you must register if you wish to be able to edit sectors). Zorg is very powerful, but the demo is too restricted to encourage registrations. In comparison, *ST Tools* from Cover Disk 78 has no such restrictions, but runs more slowly. If speed is a priority, give Zorg a look.

STF RATING: 85%

Isle of Glass

Goodmans, Disk GD2734
(2 disks, £3)
All STs, 512K or 1MByte versions
available, joystick required

Ynis Witrin - Isle of Glass combines an Arthurian plot (with some basis in historical fact) with an action-packed role-playing game cum Gauntlet clone. You are in Glastonbury Abbey, searching for the treasures which will save our fair Isle from some gruesome fate -

insert political joke of your choice.

Along the way you must battle everything that moves while finding the 13 treasures required to unite the nation under your rule. Even die-hard fans of Merlin will quickly realise the more gung-ho tactics of your average hot-headed knight are required when the first barrage of knives comes your way.

The game starts with the main screen, a map of the abbey which enables you to get to different

locations quickly and easily. From here you can find out more about the location you're in, or activate any weapons, potions, treasures or books you've found on your travels. When you're ready to search a location, click on the magnifying glass to zoom into the action.

The action

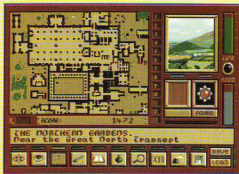
screen is reminiscent of Gauntlet and other overhead blasting games. It's here that you battle enemies and pick up objects, including the 13 treasures. You can access the action screen from the main screen at any time, but to return to the main screen (where play is suspended), you need to leave your current location.

Isle of Glass is a superb action/adventure game. Although easy to get into, it presents quite a challenge, especially in combat. Previously available as part of the MicroMaga range, *Isle of Glass* is now public domain. It's brilliant value, professionally put together and an indispensable part of anyone's game collection.

STF RATING: 92%



Hurrah! Now you can save Britain by collecting the 13 treasures and killing all your enemies which, erm, include a bunch of monks. Still, they did fire at you first.



Plan your adventures in Glastonbury Abbey from the main screen. Unfortunately, it looks as if the souvenir shop is closed.



As with all role-playing games, *Isle of Glass* has an intricate story line.

PacShell 2.62



the program to use the appropriate TTP file and off you go. The size of the files you can extract

and view from within an archive is restricted in the demo version. However, unlike the Zorg demo, for example, it gives you a good idea of the program's capabilities.

PacShell is the perfect program for those of you who deal with a wide variety of different archives (such as Internet and BBS users). It also provides an easy-to-use shell for archivers such as ZOO and ARJ, which don't have their own shells. It's a dream to use, easy to configure and definitely worth having.

STF RATING: 90%



PacShell is configured to handle ZIP, ARC, LZH, ZOO and ARJ files with the minimum of fuss.

Goodmans, Disk GD2078 All Ataris

PacShell provides shell-like interfaces for a wide variety of archiving utilities. Although many archivers now have their own shell programs, PacShell enables you to deal with a wide variety of difference archive formats from one program.

Unlike its main rival, Two-In-One, PacShell doesn't ape LHarc or ST Zip. Instead, its interface is remarkably similar to the ST's own desktop, making it feel immediately familiar, even to novices. To use it, just scour your drives and folders for archives, then double-click on them to reveal their contents. From there, extracting the archive is simply a case of opening up a destination drive and directory and dragging the files across.

You'll need copies of your favourite archivers, but once you've found them, just set

ST+

Direct from Dave Hollis: 43
Spensfield Court, Lings,
Northampton, NN3 8LZ
All Ataris (TOS 2.06 and
Falcon requires STOSFix)

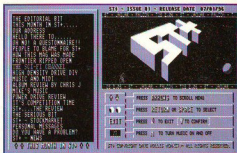
ST+ is a new disk magazine from the team previously responsible for the Panther Owners Group disk mag. It's another general ST-type 'zine with an interface coded by Tony Greenwood (who is responsible for many other disk mag interfaces).

The first issue is essentially an introduction to the Contributors to future issues of ST+ will receive a free copy of the issue in which their article is published.

team and the direction they hope ST+ will take.

Whether the market needs another non-specific ST 'zine emphasising personal contributions and stories is unclear. Only time will tell whether it has enough individualism to stand out from all the other ST disk mags.

STF RATING: 71%



UPDATES



Warp is an indispensable disk mag for Star Trek fans. The fourth issue includes a crossover story featuring Dr Who.

Warp 4
Send disk and stamp to: Keefy, 57 Hearsall Lane, Earlsdon, Coventry, CV5 6HF.
All STs (interface requires 1MByte and isn't compatible with TOS 2.06 or Falcon)

Another superb issue of the Star Trek disk mag hits the shelves, complete with all the elements that have made previous issues a hit. Although the interface isn't as attractive as previous efforts, it's still fully functional, and the content more than makes up for the decline in prettiness.

Highlights from the usual packed mix of news, stories, interviews and features include the transcription of an on-line interview with Patrick Stewart and the first part of a superb Star Trek/Doctor Who crossover story. Warp is unmissable and any self-respecting Trekkie/Trekker should get a copy now.

STF RATING: 94%

Lottery Companion 3
Goodmans, Disk GD2610
All Ataris

The latest version of Lottery Companion adds extra options, bug fixes and new layouts, making it quite an improvement over

version 1.1 (STF 73, 60%). All the lottery draws up until November 1995 are stored in case you want to pick numbers that have a proven track record.

It's easily the most comprehensive lottery program out there, and if you're interested in the statistics behind the National Lottery, you need look no further. However, if, like us with our paltry £10 return on months of investment, you want to keep a fading dream alive, it's probably best left well alone.

STF RATING: 65%

Route Finder 2.2
Wonder Disk 80, or
<http://www.ncl.ac.uk/~nbsb/>
All Ataris, 1MByte required
The latest version of Route Finder adds several new features, including the facility to write routes to disk. Falcon users will be pleased to discover that the printer routine now works properly on their machine.

The facility to enter your own roads and place names is a bonus for planning local routes. Registering removes the 200-mile limit and 15-second delay, and your feedback will influence future versions of the program. Version 2.1 scored 79% in issue 74.

STF RATING: 82%



The sun, sea and sands of Swansea are less than 200 miles from Bath.

Painter

Goodmans, Disk GD2723
All Ataris

Hmm. Painter is based on one of the earliest gaming concepts, which is all too evident from its appearance. Simplistic graphics abound as you run around a grid attempting to fill in the blocks by tracing lines around them. You're up against a time limit and must

avoid a ferocious monster that prowls the maze attempting to get you as quickly as possible.

Painter is an incredibly old game. Despite some amusing sampled sound effects and the inclusion of a level editor, this version is essentially little more than a perfect clone of the original. It's badly dated, and although briefly amusing, has little to keep you coming back for more.

STF RATING: 60%



Hal Who said the ST isn't capable of excellent graphics? Well, whoever it was, don't show them Painter. It isn't pretty, or, indeed, sophisticated.

Space Monsters

Goodmans, Disk GD2712
Alt: Atari (TOS 2.06 and Falcon
require STOSFix), joystick required

Space Monsters is a welcome resurrection of a platform-based classic that once hooked entire families. The original was Bonka, and it ran on the Dragon 32.

You are a spaceman who is at threat from an increasing number of aliens (or 'meanies', as they were known in Bonka). To kill the meanies, you must traverse the ladders and platforms digging traps for the aliens to fall into. Once they're caught, hit them over the head repeatedly until they fall through and die.

If a meanie escapes he



Sons, fathers, grandfathers all love *Space Monsters*. Isn't that enough of a recommendation? (No - Karen.)

becomes increasingly enraged and changes colour. These meanies are faster, tougher and can fall further before being killed. If they don't fall far enough the first time they can become even quicker and deadlier, so you have to dig your holes on top of each other to make sure they fall through several levels at once.

Each level is successively harder: the baddies are quite intelligent and can easily fool you if you're not careful. There's also a time limit thanks to a limited oxygen supply which is refilled for each new level (unlike in Bonka).

The concept is simple yet amazingly addictive, and although the graphics aren't particularly

stunning, the sound effects will freak you out. This is one game that hasn't dated in over ten years, proving that some games retain their qualities indefinitely. *Space Monsters* is top, top fun, and it'll set you off on a nostalgia trip back to the days when you could leave your doors unlocked...

STF RATING: 90%



Nice graphics, excellent sound, but a little disappointing overall. Still, *Brilliant Boffin Brothers* might help you beat the quiz machines in your local pub.

Brilliant Boffin Brothers

Goodmans, Disk GD2635
Alt: STs

Brilliant Boffin Brothers is a trivia game based on those found in pubs. Originally produced by MicroMagic, it's now getting an exclusive shareware re-release through

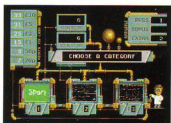
Goodmans. Registering brings a 1MByte version, plus extra questions and an editor for creating still more.

You pick your questions from one of three topics and are given three possible answers to choose from. At certain times in the game you can call for extra time, pass or even get the right answer given if you're stumped. Each correct answer gains one point and your only aim is to build as high a score as possible.

It would help if there were more categories to choose from, or if you could opt for harder or easier questions in return for bonus points. Instead you're left to face the same two screens over and over again, which quickly becomes tiresome.

The interface is very slick - detailed graphics show three professors pulling levers to bring the game to life. The sound effects are brilliantly done too, but strip these away and you're left with a rather ordinary quiz game.

STF RATING: 61%



You are must choose questions from one of three categories in *Brilliant Boffin Brothers*. Unfortunately, there wasn't a music option, so we opted for sport instead.

PD & SHAREWARE ROUND-UP

Missed a back issue? Want to know when we reviewed a particular piece of PD in the last few months? Then look no further than this definitive guide to PD reviews over the past four issues.

TITLE	PD LIBRARY	TYPE	ISSUE	RATING
Tautology 2	AdLib PD	Falcon game	76	93%
Switch	Merlin PD	Falcon game	76	92%
Everest 3.5	Goodmans PDL	Text editor	77	91%
Take 500	Floppyshop	TG500 editor	78	91%
Deadland	Merlin PD	Game	79	91%
Egale 2.7	HENSA	Utility	76	90%
Wildlife slideshows	Stellar PD	PCS pictures	77	90%
PicScan 2.7e	LAPD	Graphics utility	79	90%
Internet Access Pack 1.15	HENSA	Internet utility	79	90%
Da Capo 1.22	HENSA	Address manager	77	89%
Genocide	LAPD	STE/Falcon game	78	89%
Psygham	Floppyshop	Utility	78	89%
HERO	Goodmans PDL	Game	77	88%
Falcon STOS Extensions	Floppyshop	Falcon STOS	78	88%
Nova 9	James Bird	Diskmag	79	87%
Xlator 2.0	Merlin PD	Translator	76	86%
Novadisk 8	James Bird	Diskmag	76	85%
National Lottery Simulator	Floppyshop	Guess	78	85%
Thing Backgrounds	AdLib	IMG files for Thing	79	85%
Craghaven	LAPD	Game	78	84%
Emperor	LAPD	Game	78	84%
Towers 1.5	LAPD	Game	79	84%
Anoraks of Doom	Goodmans PDL	Game	76	83%
Third Dimension 15	Floppyshop	Diskmag	76	83%
Third Dimension 20	Floppyshop	Diskmag	79	83%
Paula 2.4	Goodmans PDL	MOD player	79	82%
Pipetris	Cover Disk 77	Game	77	81%
Muzak Player 2	Floppyshop	Music player	78	81%
Pack CDK	Goodmans	Calamus utility	79	81%
Pixikrome	Floppyshop	Image processing	76	80%
STOSSER Multimedia	Goodmans	Multimedia displayer	77	80%

Splitter 2.0

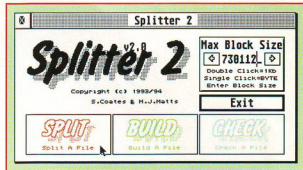
Ad.Lib PD
All Atari5

Splitter is a simple program for splitting large files into manageable chunks that can be transported on floppy disks or transferred across networks. For example, a 2MByte image file can be split and copied on to three double-sided floppy disks. You can also split large archives, so you could even compress the 2MByte file down to 1MByte and spread it across two disks.

The interface is clear and simple enough, but selecting the maximum file sizes isn't especially easy. You have to enter the figure manually, or use the mouse to alter the size. It would be nice to have preset options for common disk configurations, and for automatically splitting a file into equal-sized chunks.

These gripes aside, however, *Splitter* is a useful program that's relatively simple to use.

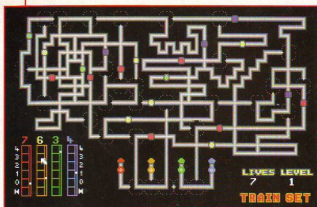
STF RATING: 77%



Splitter will appeal to those of you interested in transferring gigantic files by portable means, such as floppy disks.

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This is the most difficult level on *Train Set* – you'll get nightmares just thinking about it. Thankfully, you can start at a much less demanding level, one that resembles Thomas the Tank Engine's branch line.

Train Set 2

Goodmans, Disk GD2713
All Atari5 (TOS 2.06 or Falcon
with STOSFix), 1MByte required

Train Set is intensely difficult, annoying and engaging. At first glance you might think it's a game for the younger generation, but you'll learn differently when you play it.

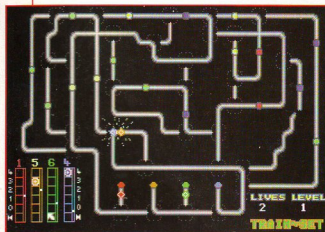
The aim of the game is simple, but the game itself is not. You control four different coloured engines, and your job is to send them off around a rail network collecting appropriately coloured packages. Collisions with packages of the wrong colour results in explosions and loss of life; collisions between trains end the game, period.

Sets of points enable you to switch tracks and set your train on a different course. The trains go at a variety of speeds and, once halted, can

change direction. Beware, though: you cannot simply send each train out in turn, because if they are left inactive for too long, trains will move of their own accord.

The first thing to do is set the controls to Very Easy and *Train Set* 1. This is a game which will take minutes to grasp, but hours and days to master. It's original, reasonably presented and quite possibly good work experience for anyone considering a career in British Rail. If you want to drive yourself crazy juggling four trains on a rail network, give *Train Set* 2 a try – it won't disappoint.

STF RATING: 83%



As ably demonstrated here, Taz would have great fun with *Train Set*, although his skills are unlikely to be in great demand from prospective employers.

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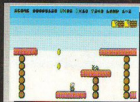
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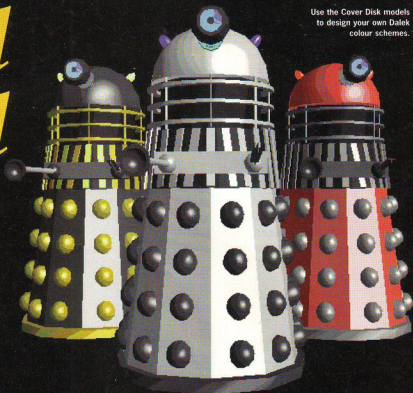
37 Crossall Street, Macclesfield, Cheshire SK11 6QF



3D and beyond

Use the Cover Disk models to design your own Dalek colour schemes.

Following on from our 3D graphics feature in issue 76, Dug Armstrong returns to explore the darker side of modelling and rendering on your ST and Falcon...



Once you start to tinker around with 3D models on your ST or Falcon, you quickly realise how addictive the subject can be. It's the thrill of the template, the exuberance of the extrusion, the sheer naked sex appeal of the texture map. So, dust off your 'sad gits' anorak patch, scatter a few more

sheets of dog-eared graph paper around the room and prepare to have your polygons well and truly rendered.

In this month's feature, we'll be looking at some of the

more complex objects you can model in 3D, using elements of *Cyber Studio* and *Xenomorf 2*. Since the feature in issue 76 introduced a Tardis model, it seems only fair to redress the balance and create the ultimate *Doctor Who* model: the Dalek.

The thrill of the template, the sheer naked sex appeal of the texture map

As usual, there are versions of the final model on the Cover Disk for use with both programs. These files will enable you to

experiment with different Dalek liveries, animate the mechanical beasts and – assuming you still have the models from issue 76's Cover Disk – construct complete 3D

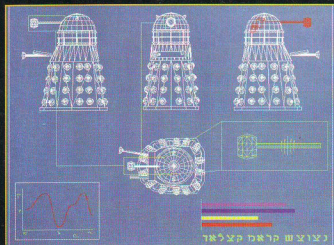


No-one seems to have told these two thickies that the Tardis is indestructible. Mind you, I'm glad I'm not in there, I might be getting a bit green about the gills.

scenes. ST users with 1MByte of memory should use the DALEK1MB file, while 4MByte ST and Falcon owners can enjoy the enhanced DALEK4MB versions. See the accompanying text file for full instructions. Sadly, this month's models can't be used with *RezRender* – they're simply too complex for it to handle.

If you wish, you can now cut straight to the rendering and animation section on page 42 and start generating

your own images. However, if you're even the least bit curious about how our Daleks were constructed, turn the page and prepare to discover secrets that even Time Lords would sell their grannies for...



Tinker around with the doodahs of one of the deadliest lifeforms in the known universe.

Anatomy of a monster

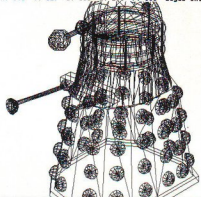
There's a lot more to building a Dalek than tin foil and sink plungers. First, you have to extrude the exterminators...

When we first decided to construct a Dalek, two vital facts emerged. First, the little brutes aren't quite as easy to put together as they look. Second, there are various 'types' of Dalek, from the original tin-foil and cardboard creations of the first Doctor to the sleeker, more detailed types seen in later series. We're going to create an artistic impression of the Dalek introduced during the reign of the third Doctor, with a slatted collar and slightly smaller base. All the

modelling in this section is done using *Cyber Sculpt* alone.

The model was created from the bottom up, beginning with the flat base. This is a simple extruded panel – a 7-sided polygon template which has been tweaked into the correct shape. The same template was used to create the main body segment, by using re-sized versions as the start and end points of a cross-section. Re-using basic template shapes is the key to consistent shape design, and can save you a great deal of work later on, too.

H: 040 V: 027 B: 000 Z: 200 P: 350 Edges Only



Congratulations, Mr and Mrs Davros, it's a 250kg psychotic killing machine!

Since there are many more spherical or curved objects in the Dalek than in the previous feature's Tardis, greater use was made of the 3D primitives available in *Cyber Sculpt*. The 'spots', for example, were created by copying basic ten-sided hemispheres, and aligning them with the base in

vertical strips of four.

Primitive power

It is worth noting that the Tube primitive should not be used for a simple cylindrical rod, because it creates a hollow

tube with twice the number of faces you really need. In fact, the only tubular objects in the Dalek are the iris (on the eyeball) and the cage rings,

Every other tube-shaped object is, in fact, a solid cylindrical prism

which have been flattened out to resemble discs. Every other tube-shaped object is, in fact, a solid cylindrical prism. The Disc primitive was used to create some of the circular shapes in the 1MByte version. It creates objects which are only one face thick and thus conserves memory.

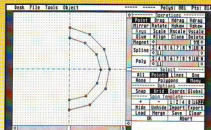
The dome is a larger but similar object, and the 'cage' which surrounds the neck area

H: 144 V: 012 B: 000 Z: 200 P: 350 Edges Only



The neck cage has a central tubular 'throat' which fills in the hollow centre and makes the interior appear solid. Now say aaaaaargggghh.

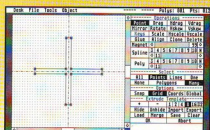
SPOTS, SUCKERS AND LASER DEATH



1 This fairly innocuous looking shape can be used with the Spline tool...

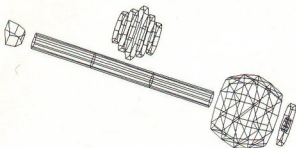


2 ...to produce a scooped-out hemisphere that makes an acceptable Dalek sucker.



3 Can you guess what this 'cross' shape will look like when we extrude it?

H1: 670 V: 666 B: 800 Z: 724 P: 350 Edges Only



The eyestalk is constructed entirely from discs, tubes, toilet rolls, sticky-back plastic and a pair of Val Singleton's old knickers (Steady on - Karen).

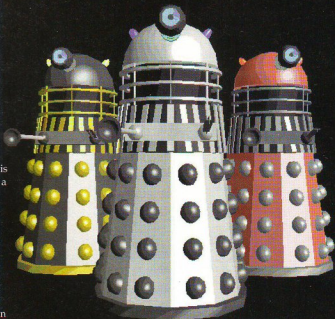
The most complex object in the model is the collar, which sits between the body and the cage. In the real-world models, it appears to be a flexible metallic sheet wrapped round the top end of the body. The template used to extrude this object was created by stretching and squashing a circle to fit the top of body.

In the neck

The 4MByte version of the final model also features an enhanced collar with vertical slats placed around it at 15-degree intervals. The various appendages were all created from the same basic primitives, except for the sucker and death-ray, which were generated by extrusion. This is a very efficient way to create a model. It also avoids the strange rendering effects you sometimes get if you create complex shapes manually.

As you can see, the final model looks very impressive, although it's a little slow to work with on a standard ST. We recommend that you deactivate the spots when

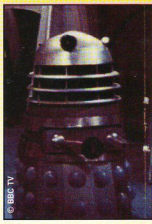
rotating the model in *Cyber Sculpt*'s 3D mode, as they dramatically increase the re-draw time and slow down movement to a crawl. If you are using *Xenomorf*, try running it on a machine equipped with a maths co-processor for faster re-draw and rendering times.



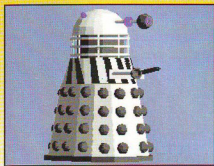
GETTING IN SHAPE

To model real-world (or off-world) objects effectively, you need to gather as many pictures and illustrations of your subject, from as many different angles, as possible. Video tapes are particularly useful, because you can

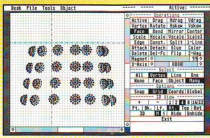
make use of freeze-frame and slow motion. We searched through our Doctor Who collection for hours before finding a rear-view shot of a Dalek. Videos also help you visualise the colours required to make the model look authentic.



There are various 'types' of Dalek, from the tin-foil and cardboard creations of the first Doctor to the sleeker, more detailed types seen in later series. We're going to create an artistic impression of the Dalek introduced during the reign of the third Doctor



4 Here's a clue: Exterminat! Exterminat! Don't try this at home, you'll frighten the cat.



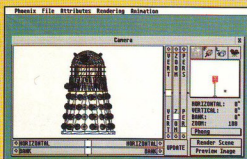
5 The most complex object in the model is a symmetrical cluster of small hemispheres...

H1: 652 V: 661 B: 800 Z: 200 P: 350 Edges Only

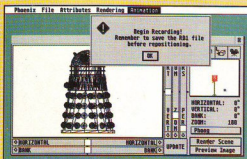


6 ... which gives the Dalek its 'spots'. It'll take more than a medicated facial wash to eradicate those.

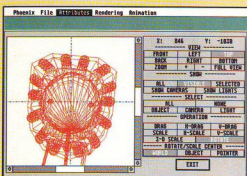
DALEK IN ACTION



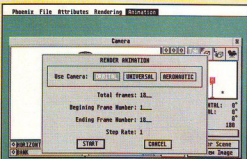
1 To record a *Xenomorph* animation, first load up the model and set the initial viewpoint, lighting and object positions.



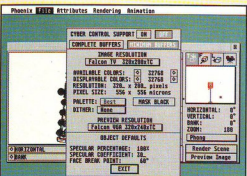
2 Now select **Begin Record**. You will be reminded to save a copy of the file with the object in the current starting position.



3 Now place the object at the end position and select **End Record**. A file with the extension PA1 will be generated.



4 Select **Render Animation** and load the PA1 file to generate a sequence over a specified number of frames.



5 Each frame will be at the size and colour depth specified on the Configuration screen.

This 1024 x 768 GIF image was created with *Xenomorph 2* and *DALEK4MB*.



Animation of the Daleks

Now you've created your Dalek, it's time to bring it to life and record its conquest of planet Earth. Lights, camera, action, exterminate!

If you want your models to be convincingly fearsome, you need to colour and render them in a realistic fashion. The Cover Disk files that accompany this feature have been pre-coloured for *Xenomorph* and *CAD 3D 2*, although you can, of course, play around with the settings. If you want to add motion and animate your Dalek, there are several possibilities.

Cyber Studio

When combined with the *Cyber Control* programming language, *CAD 3D 2* is by far the most capable animator

around. Instead of positioning objects, lights and cameras manually and recording your animation one frame at a time, *Cyber Control* enables you to write a script that can automate all of *CAD 3D's* functions. You can then generate an entire recording while you go off and trounce a *Time Lord* or two. *CAD 3D* only uses 16-colour polygons, so rendering times and playback speeds of animated sequences are very swift indeed.

The Cover Disk file *SPIN360.CTL* shows how a simple program can be used to rotate a *3D2* object around the



This is the 16-colour output...



...from *CAD 3D* and *Cyber Control*.

OPTIMIZATION



The smaller model, DALEK1MB, shows how the colouring of individual faces can slim down the size and complexity of your model without losing too much detail. The 'collar' on the left has been coloured to give the impression of slats round the side. This was done using Cyber Sculpt's face colouring facility.

The smaller model, which takes far less time to render,



looks almost as good as the DALEK4MB version, which features 3D slats. In *Xenomorf* and *RezRender*, you can redefine the two colours that make up the shape individually. However, the object as a whole cannot be re-coloured in CAD 3D, because it would revert to a single continuous colour. Other uses for this technique include primitive texturing, lettering or forced shading.

centre of the CAD 3D universe.

This program can be used to generate a simple spinning animation of the Dalek, or any other 3D2 model (simply change the filename in the LOAD3D2 statement).

Similarly, you can also change the step rate of the rotation by altering the values in the FOR loop and ROTATE command. The values shown create a 36-frame animation that rotates by 10 degrees each frame. Changing the total frames to 71 and the ROTATE parameter to

five degrees will generate a smoother (and larger) sequence.

Unfortunately, the DLT animations that CAD 3D generates have to be converted into the more compact SEQ format before they can be displayed by the run-time player ANIMATE4. *Cyber Paint*, another essential component of the *Cyber Studio* series, is the only program that enables you

to convert animations to this format. It can also post-process your rendered images in a number of ways.

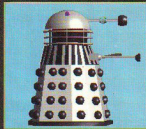
Xenomorf

Xenomorf users should use the Animation tweening facility, which enables you to move the object as well as the camera. Move your model into the desired starting position and

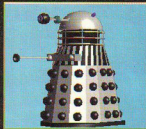
select Begin Record. You will be reminded to save the model before continuing, after which you should move it

to the end position, using the rotation values below, and select End Record.

To recreate the spinning effect seen in SPIN360, set the object rotation angle to 0 degrees at the start and 180 degrees at the end using the Top View on the Positioning screen. This will create a file with the PAI extension, which you can use as the basis for a



Xenomorf can produce cracking...



...TrueColour animations.

tweened animation by selecting Render Animation and loading up this file.

Before you start the animation, you will be asked if you want to animate cameras and lights by position or setting. Choose positioning for the camera and setting for the lights. (You may be wondering why you can't just move the camera, rather than the object itself. The reason is that moving the object produces a more realistic lighting effect - the light moves over the surface of the object rather than remaining constant. If you moved the camera and kept the object still, one part of the object would always be in shadow.)

Once you've set up the lights and camera, a dialog appears asking how many frames you want to produce (18 in this example), after which the animation is rendered as a series of still pictures in the size and colour depth specified in the Configuration screen. Now reposition the object at its starting position, or reload the original, and repeat the process using ten degrees as your start point and 170 degrees as the end. This will create a further 16 frames. Join these frames together in the correct order and the result will be similar to SPIN360.

Off to the flicks

Xenomorf 2 comes with a set of animation utilities that automatically build an FLC or FLX format sequence from the frames generated by the render. This eliminates the need to string them together manually with a graphics program, such as APEX Media. That said, APEX Media offers you much greater control over the final sequence, as well as enabling you to splice together smaller animations and employ various overlay options.

Of course, spinning an object around in the middle of the screen isn't exactly the

height of creativity, but it gives you the syntax of the basic code from which all *Cyber Control* animations are produced. You can also use either method to produce a rotating preview of a group of objects.

Once you've created a simple sequence, you'll be more familiar with the way 3D animation works and better able to plan more complex ones. For example, the hierarchical linking features of *Cyber Control*, which define spatial relationships between objects within a model, could be used to swivel the eyestalk. What about varying *Xenomorf*'s Glow and Transparency parameters to produce illumination effects in the headlamps and iris?

Steady on

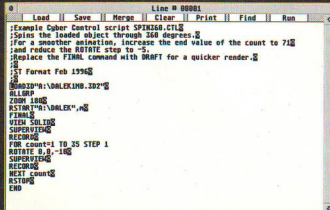
Before you start planning out enormous *Cyber Control* scripts or grappling with tweening techniques, bear in mind that the best animations are usually a combination of object and camera movement, lighting changes and post-processing of the rendered bitmaps. Sometimes the best-looking bits come from the simplest operations, and there's usually more than one way to achieve a desired goal. After that, the only tools you need are your imagination, plenty of free time and an unhealthy obsession with violent alien life-forms. Now, who can scream, 'Exterminate', in a harsh, grating monotone? *stf*

SOFTWARE

Cyber Studio	£15
CAD 3D 2	£15
Cyber Sculpt	£15
Cyber Paint	£25
Cyber Control	£15
Xenomorf 2	£89

All the above programs are available from 16/32 Systems (= 01634 710788).

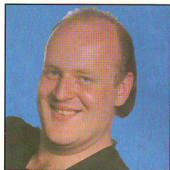
APEX Media £99
Available from Titan Designs
(= 0121 6936669)



Cyber Control makes animations easy with a comprehensive scripting language.

ST Answers

Fresh from his second armed siege (*Frank, what is it about your neighbourhood?*), our man Charlton faces down another barrage of ST questions.



MOUSE MAYHEM

Q I am having trouble with my computer – it seems the mouse is no longer sending any information to it.

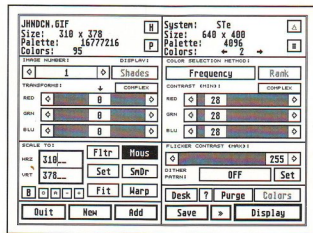
I have used five mice to test it and exactly the same thing has happened every time. After I boot the computer, I am able to move the mouse pointer, but I can't click on icons or double-click on any of the pictures.

I have searched for a virus and it finds one on the same disk every time. Even though I have erased the virus from the disk, it appears there again and again. Is this a software or hardware problem?

James Selway, via e-mail

A This isn't a software problem, James, and it isn't caused by a virus. No known ST virus behaves like this, and it's unlikely that a new virus could cause this effect.

It sounds very much as if there is a hardware fault in your ST, probably associated with the ports where the mouse connects. Thanks to Atari's decision to tuck them away underneath the case, these sockets have always been prone to failing. You really need to have your sick ST tended to by a professional repair outfit. Check out the Inside Your ST feature in issue 78 for a



We gave you the superb image viewer Speed Of Light on Cover Disk 72. If you missed that issue, order a copy from your favourite PC library.

comprehensive guide to hardware problems and their solutions.

As for the mysterious re-appearing virus, we're stumped on that one. Which virus killer are you using to delete it? Any good killer will tell you what the virus is called – get back in touch and let us know which program you're using, and what it says on the screen when you kill the offending bit of code.

FROM ACORNS...

Q Is there any way I can load images produced on my school's Acorn computer into my Atari ST? Ian Renwick, Ludlow

A If you're using an Acorn Archimedes (rather than an old BBC Micro), RISCOS 3 should come with an image conversion utility. We're not sure of the exact name, so ask your teacher. You should be able to save your pictures on to a disk in GIF format and then load them into an ST viewing program, such as the very competent Speed Of Light from Cover Disk 72.

DEXTROUS

Q I was wondering what happened to Dextrous by Black Scorpion

Software. I live in the USA, and over here news about the Atari is hard to come by. Back in issue 62 I read a news clip about Dextrous. It looked to me to be the best Desktop ever for the Falcon.

S A Bretske, via e-mail

A According to David Encill of Titan Designs, Dextrous was "canned over eighteen months ago" and is extremely unlikely to appear. Apparently, what started off as a "cyber-ionic file manager" grew out of all proportion and became too unwieldy to be viable. This is a big shame, because it looked great when we saw it at a show.

SPOOL ABOUT

Q I regularly need to print out various long files from Write On and other word processing programs. I have upgraded my Citizen Swift 200c printer from 8 to 136K, but the time taken to free up my STFM so I can continue editing remains the same.

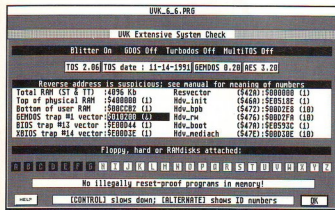
I assumed the whole file is sent to the printer at once, and that, as the file is less than 136K, the ST would soon be able to move to another task. How does the Atari handle print routines, and is there a way of getting around this? Michael J Allen, Dartford

A You're right that enlarging the printer's buffer should put less strain on your ST while you are printing. However, I notice from your letter that you're using your word processor in graphical mode (to produce sharp output from bitmapped fonts). You'd be surprised how big documents can become when you're using graphical fonts, although upgrading the buffer should still produce an improvement in speed.

Fortunately, your problem can be solved with a software print buffer. These can be either memory- or disk-based.

Memory-based print spoolers set aside a portion of your ST's RAM to use as a buffer between the word processor and the printer. Software buffers run in the background, so your ST simply dumps the data to be printed to the buffer, then returns control to you as the data is gradually 'spooled' to the printer. There are lots of freeware and shareware buffers, so any good PD library should have a selection.

If you're short of memory, a disk-based spooler does essentially the same thing, but holds the temporary file on disk rather than eating into valuable memory. You'll need a hard drive to use a disk-based spooler, because



Virus-killer UVK costs £12.95. Contact Douglas Communications on 01625 850270.



Black Scorpion's Dextrous, the Desktop that never was... and never will be.

floppies are too slow. The shareware GEMSpool spooler is superb – put together your favourite PD library to obtain a copy.

INTEGRATION

Q I am thinking of buying a DTP package to use for my school work. Are there any DTP packages that can help me draw, write, use spreadsheets and produce graphs?

If there isn't one to handle all this, would I need to use various programs to produce data which I can import into a DTP program?

Geoffrey Lewis, Essex

A Only one program springs to mind: AtariWorks. It costs £99.95 and is available from HiSoft (☎ 01525 718181). It's an integrated package and has a word processing module with basic DTP functions, a database and a spreadsheet. The spreadsheet module can produce graphs and bar charts from your data, but Works doesn't provide any art or drawing tools.

There are lots of shareware

and freeware programs that can help, though. A vector graphics drawing package like Kandinsky can produce smooth, scalable artwork, and the shareware bitmap package Munch is also very good.

Our recommendation is a copy of Papyrus Gold (£129.95, from HiSoft ☎ 01525 718181) and a handful of PD tools to perform the other functions. If you have Cover Disk 64, Graftek will produce smart-looking graphs for you, and the other tools we mentioned are available from most PD libraries.

A MAN ALONE

Q I'm an old-age pensioner who took up computing when I retired – nothing serious, just something to do on a rainy afternoon. I find animation and moving graphics fascinating, and consequently most of my programming is done in STOS. I write simple guessing games, shoot-'em-ups and bombing games – nothing very complicated, but it amuses me.

However, I seem to be rather isolated. I have only met four people with Atari

computers, and none of them do any programming. I would dearly like to meet someone with whom I could swap a few ideas about programming or writing games, preferably in STOS. So, if there is anyone in the Ramsgate area of Kent who feels like me, perhaps they would get in touch. I'll try not to be a nuisance, the main thing is to make contact and have an interest.

Stuart Beveridge, Kent

A If anyone would like to get in touch with Stuart, you can telephone him on ☎ 01843 593043.

Stuart, another option is to join a user group or computer club. One in particular which might interest you is the ICTARI Programmers' Group. ICTARI is much more than a local group, and has members all over the country. It runs a service for programmers looking for like-minded folk to swap ideas and help each other – exactly what you're after. Drop ICTARI a line at: 63 Woolsbridge Road, Ashley Heath, Ringwood, Hants BH24 2LX.

UPGRADES

Q I have a 520STFM with a single-sided drive. The nearest computer shop I know will not upgrade my computer, so do you know where I can buy an STE with 1MByte, or at least a decent emulator for PC games?

Anon, Aberdeenshire

A You can upgrade your STFM, but you'll need to send it away if you want the upgrade fitted for you. Try The Upgrade Shop (☎ 01625 503448) for starters.

If you'd rather buy an STE, your best bet is to check the Reader Ads (page 58), because Atari isn't producing them any longer. Companies like Compo (☎ 01487 773582) and Gasteiner (☎ 0181 3456000) sometimes have refurbished STE machines, so you could also give them a try.

As for emulators, the hardware emulators are only useful for running serious applications, and modern PC games require more power than an emulator can provide.

DISK BLUES

Q I am thinking about getting a second floppy disk drive for my

STE, and I hope you can answer my questions.

1 Which drive would the Auto folder run from – A, B, or both? **2** What is the main advantage of owning two drives? **3** Can I leave my boot disk in drive A, with Accessories on it, and use drive B for other applications? Can I keep my TeraDesk Desktop and so on in Drive A, so I don't have to insert my boot disk every time I re-set the computer?

4 Which drives can you recommend? **5** If I put several programs in an Auto folder, will they all load in turn, or can you only have one program in there?

Gavin Johnson, Leeds

A Here we go:
1 The Auto folder runs from whichever drive you boot from, whether it be a floppy or hard drive. Some B drives can be used as boot drives, but there's little point, to be honest. **2** You double your disk space for starters. It makes life a lot simpler, and cuts down on the number of disk swaps when you want to save a file. It also makes copying disks easier, because you don't have to swap disks.

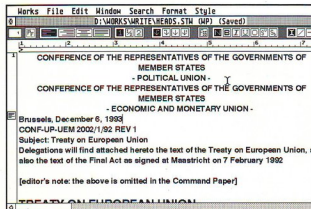
3 Yes, that's exactly what you'd do with an extra drive. You can leave your boot disk in A, and change the disk in drive B when you change applications.

4 They're all much the same, really. We're not terribly keen on drives which take their power from the ST's joystick port, though – look for one with a dedicated external power supply. **5** No, you're not limited to one program. You can add as many as memory permits, and they're executed in turn. The ST runs them according to the order you copied them to the disk, but you can use a utility like the PD program Autosort (check your usual PD Library) to change the order.

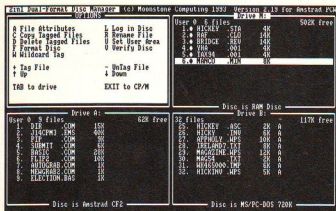
SPOOKY!

Q In the ST Answers section in issue 78, James Selway of Harrogate asked whether one can use GhostLink to access a PC's floppy drive. Your reply was: "No. As far as we know, GhostLink will only allow you to use the PC's hard drives."

I just thought you'd like to know that it can access the floppy drive, and in fact any drive that can be accessed via



It won't clean the kitchen for you, but AtariWorks does most other things.



2-in-1 enables PCW owners to copy file on to MS-DOS disks – which an ST can read.

DOS, including floppy drives (both regular and high density) and, in theory, CD-ROM drives and even networks.

Phil Hough, via e-mail

A Thanks for that tip, Phil. At the time, we didn't have a PC handy, so we couldn't test GhostLink properly. There you go James, the real answer to your question!

PCW PLUS

Q Could you tell me whether there is a way to get files from the 3-inch disks used by an Amstrad PCW8256 on to my Atari? I've thought about buying a 3.5-inch drive for the PCW, but nobody seems to know whether or not the ST could read the disks.

I've always used LocoScript on the PCW, and the version I have can save documents as ASCII files. How can I get these files across to my ST? Phil Mead, Brighouse, Yorkshire

A The PCW uses the old CP/M operating system, so the ST won't read PCW disks directly. However, you can use a program called 2-in-1 to copy files on to PC-formatted 720K 3.5-inch disks, which your ST can read. 2-in-1 costs £35.19 and is available from Locomotive Software (☎ 01306 740606).

Another solution is to use a disk transfer bureau – a company which will physically move your data to another disk format for you. Since the ST can read PC-formatted double density disks, you could have the ASCII files transferred to PC disks and use them straight away. MAPEJ in Shropshire handles PCW 3-inch disks – call ☎ 01691 778659 for details. MAPEJ also handles other

formats, including Amiga, CPC, BBC and even Apple II media.

BIRD OF PREY

Q I am thinking of buying a Falcon, and I have a few questions: 1 Do I need a monitor for it, or can I just use my television? 2 What is the processing power of the Falcon? 3 Does it multitask? 4 Can I use GEA BASIC 2 with it?

5 Which TOS version does it use? 6 What screen resolutions does it support? 7 What is TrueColour?

8 Can I use my old STE games with it? 9 How much would the cheapest second-hand Falcon with 14 MByte of RAM cost? 10 Can I use my ST external disk drive with it? Andrew Smellie, Wishaw, Scotland

A Hello again, Andrew, you're becoming a regular face around here! 1 The Falcon works well with a normal television set, but you'll get a much clearer picture with either an RGB or VGA monitor. Unless you have a VGA monitor, the higher screen resolutions use an interlaced mode which flickers a lot, particularly on a television.

2 The Falcon runs a 68030 processor at 16MHz. The greater processor speed, coupled with the Digital Signal Processor chip and the 68030's on-board instruction cache, makes it fly compared to a standard 8MHz ST.

3 It does multitask, but not as standard. You should get a copy of Atari's MultiTOS with it, which provides a full multitasking operating system. Alternatively, the forthcoming Magic 4 from System Solutions looks set to provide the best multitasking ever seen on a Falcon.

4 Not really, no. GFA 2 is

STA GOES GREEN!

You might like to know that we've gone environmentally friendly at ST Answers. Stamps from your letters are sent to the Guide Dog appeal, and all your used letters and envelopes are sent to the local recycling bin. Nothing gets wasted when you write to us – nice, eh?

very unreliable on the Falcon. We recommend you use the TT version of GFA 3 – version 3.6TT.

5 The first Falcons came with TOS 4.01, whereas later models used TOS 4.04. If you're buying a secondhand Falcon, TOS 4.04 is definitely the better buy.

6 Since the Falcon's video hardware – the VIDEL chip – is fully programmable, it offers a lot of flexibility in this department. An unmodified Falcon can go up to 640 x 400 pixels in interlace mode on a TV or RGB monitor, and up to 640 x 480 in 256 colours on a VGA monitor. The various hardware and software screen expanders give you even greater resolutions.

7 This is a moot point! Officially, TrueColour is defined as 24-bit, which provides 16.7 million colours. Atari's definition of TrueColour on the Falcon is actually 16-bit, with 65,536 colours to choose from. Take it from us, it still looks smart.

8 Yes and no. Some will run straight away, and others will need an ST 'emulator', such as the shareware Backwards 3. Almost all games which run on the STE will run on the Falcon.

9 Prices depend on the state of the stock market and the phases of the moon – check the Reader Ads on page 58 for details.

10 Nope. The Falcon doesn't even have a socket for connecting another floppy drive.

IFF ONLY...

Q I need a good program to convert pictures from different formats. I've seen GEMView mentioned in ST FORMAT, but the price differs

GEMView can save images in the IFF format, enabling you to load alien images into Deluxe Paint.

from place to place – where is the best place to buy it from? Does GEMView support a printer, and will it save in the Deluxe Paint IFF format?

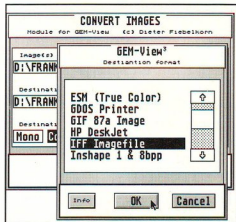
Also, I have loaded some grayscale pictures into Deluxe Paint, but it comes up with its own default palette each time. Is there any way to get the right colours?

Kevin Martin, Bournemouth

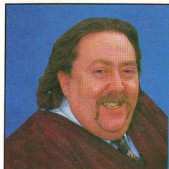
A First, you need to understand that GEMView is shareware, so no matter which PD Library you buy it from, you'll still need to pay the registration fee for the program. GEMView is unrestricted for about 30 days – after that, you need to register to use it properly. Floppypshop, LAPD and FaST Club all provide a good service, but see page 59 for a complete list of PD libraries.

GEMView will save files in IFF format, and it does provide printer support.

As for your troublesome grayscale pics, remember that the STFM only supports eight levels of gray compared to the 16 levels used in the STE. If your images are 16-level grayscale, Deluxe Paint will only show the first eight shades. If you use a program like GEMView to process the images first, you'll be able to dither them to fit the STFM's 512-colour palette.



Send your ST-related questions and problems to Frank at: ST Answers, ST FORMAT, Future Publishing, 30 Monmouth St, Bath, Avon BA1 2BW, or e-mail them to: Frank.Charlton@dia1.pipex.com.



Mac Marsden saunters up to the chalk board, reads stories, writes ASCII codes and does a little 'rithmetic. It's as easy as G F A...

GFA Workshop

STORY TIME

Q Can you explain how to create some form of movement or animation on the screen. I would eventually like to produce an animated story book.

Moira MacDonald, Durham

A Moira, the simplest form of animation involves making a letter – the letter 'q', say – move across the screen and back again. In simple terms, all we are going to do is:

- 1 Print the letter 'q' on screen
 - 2 Wait a few seconds.
 - 3 Print over the 'q' with a space.
 - 4 Move the 'q' on one square.
 - 5 If the 'q' hasn't reached the end of the screen, then go back to 1.
 - 6 When the end of screen is reached, reverse the process.
- The last step is achieved using a pointer or switch, which is just a variable that holds a value (one or zero). If it is zero, you move the letter to the right; if it is one, you move it to the left. See Panel One for a sample listing.

The next step is to try simple graphical movements using the same principle. Once you have mastered that, see if you can hold the graphic in one position and only move it when a specific key is pressed. This is the starting point of game programming.

Once you are familiar with the fundamentals of moving characters around the screen, look up the commands `get$` and `put$` in your manual. These commands enable you to move graphics one pixel at a time instead of in character blocks, producing a much smoother effect.

ASCII AGAIN!

Q I know you must have answered this question in the past, but could you provide me with a routine that will print ASCII codes on the screen, along with the corresponding characters.

James Bliss, Taunton

A Okay, James, the quick solution is listed in Panel Two. I have omitted the characters 0-31 as they are control characters and don't have useful printable characters.

SORT ME OUT

Q I would like to be able to enter a mathematical equation using a string, say "12+100=", and then find the answer. I have tried and tried, and I'll give anything for a solution.

Dave Skelton, Alnwick, Northumberland

A Anything, Dave? A simple method for evaluating a string is shown in Panel Three. However, it is just a solution to one 'set' problem. If your input is random, you will have to check for multiplication, addition, subtraction and division signs. You might also check for square roots, powers, and so on.

If you really want to delve into this type of programming, I suggest you read some books on software development or attend college to do a relevant course. A course is probably the best bet, because you'll also have the benefit of the lecturer's experience.

PANEL ONE PANEL ONE

```

A$ = "q"
B$ = ""
POINTER=0
X=0
Y=10
DO
  PRINT AT(X,Y);A$
  PAUSE 5
  PRINT AT(X,Y);B$
  IF POINTER=0
    X = X + 1
  END IF
  IF POINTER = 1
    X = X - 1
  END IF
  IF X > 79
    POINTER = 1
  END IF
  IF X <= 0
    POINTER = 0
  END IF
LOOP UNTIL MOUSE$ ! CLICK MOUSE TO EXIT
  
```

PANEL TWO

```

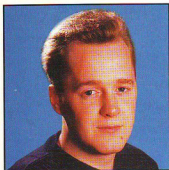
COUNT = 0
FOR F=32 TO 127
  PRINT " [";F;"] = ";CHR$(F); ! THREE
  SPACES BEFORE [ (all one line)
  COUNT=COUNT+1
  IF COUNT=7
    PRINT
    COUNT = 0
  END IF
NEXT F
  
```

PANEL THREE PANEL

```

A$ = "12+100="
B$ = ""
C$ = ""
D$ = ""
POINTER=0
FOR F = 1 TO LEN(A$)
  IF MID$(A$,F,1) = "+"
    POINTER=1
  ENDIF
  IF POINTER=0
    B$=B$+MID$(A$,F,1)
  ENDIF
  IF POINTER=1 AND MID$(A$,F,1) <> "="
    C$=C$+MID$(A$,F,1)
  ENDIF
NEXT F
PRINT
PRINT "THE ANSWER IS ";A$+(VAL(B$)+VAL(C$))
  
```

Send your questions to: GFA Workshop, ST FORMAT, Future Publishing, 30 Monmouth St. Bath, Avon BA1 2BW, or e-mail Mac at: mac.marsden@dia1.pipex.com.



How do you open a file when you don't know where it is? Detective Andy Gisby digs out his deerstalker and hunts for clues.

Assembly Line

Your ST's implementation of GEMDOS makes the handling of files and data in assembler relatively simple (see Assembly Line, *STF 77*). However, eventually you will need to find a file without knowing where it is. GEMDOS gives you two operating system calls (TRAPs) for finding files. These calls, incidentally, are the basis of the GEM file selector windows.

Both calls utilise an area of memory called a DTA (Disk Transfer Address) buffer. It is important to understand this buffer, so take a good look at the DTA Buffer diagram. You mustn't modify the first 20 bytes, because the operating system uses this area directly.

Before you write a program to search for files and use a DTA buffer, you must allocate your own DTA. This is mainly because of a 'feature' that enables the DTA to share the same memory area as a

passed parameter command line. It's annoying, but the allocation of a new DTA (Panel One) is a simple procedure.

Two calls are used to search for files: "f_sfirst" (\$4E) and "f_snext" (\$4F). The important one to get right is "f_sfirst". This call primes your DTA and potentially finds the first file. To make life even easier, GEMDOS allows you to search for multiple files using wild-card strings (thus the "f_snext" call). A wild card is a pattern matching facility:

- **my*.txt**
Find all files starting with "my" that have an extension of ".txt".
- **mytext.***
Find all files starting with "mytext" plus any character. Any extension is acceptable.

Although the wild-card system is excellent, there are some combinations of ? and * that your ST won't understand, so keep the search strings relatively simple. If you have any doubts about a combination, you can experiment with the standard GEM file selector window.

Suppose you want to find data files with a "dax" extension. You could use the code in Panel Two piece of code to find the first occurrence...

The **attribute_match** word allows you to specify the types of file you want to find. The diagram to the right shows how it is constructed.

The functions always search for normal (read/write) files, irrespective of bit mask

PANEL ONE PANEL

```
allocate_DTA
; Save old DTA (we need to restore this on termination)
move.w    #$2F, -(sp); f_getdta
TRAP      #1
add.l     #2, sp      ; tidy stack
move.l     d0, old_DTA; old DTA

; Allocate new DTA
PEA
move.w    #$1A, -(sp); f_setdta
TRAP      #1
add.l     #6, sp

our_DTA   ds.b    44    ; Disk Transfer Address Buffer
EVEN
```

PANEL TWO

```
move.w    attribute_match, -(sp)
PEA
search_string
move.w    #$4E, -(sp)      ; "f_sfirst" Find first
occurrence                 (all one line)
TRAP      #1
add.l     #8, sp
cmp.l     #0, d0           ; -33 = No file found
BEQ       no_file
;
;
RTS

attribute_match ds.w    0
search_string   ds.b    0
EVEN            ; All .dax files!
```

THREE

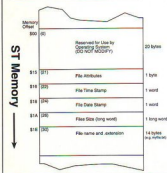
```
move.w    #$4F, -(sp)      ; "f_snext" using DTA, find next
TRAP      #1
add.l     #2, sp
cmp.l     #0, d0           ; -33 = No file found
BEQ       no_more_files
;
;
RTS
```

settings. Upon finding a file, the DTA will contain relevant information for that file. Refer to the DTA diagram to see the offsets for the various elements.

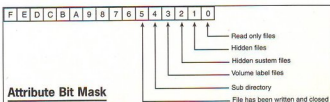
To find the next (and

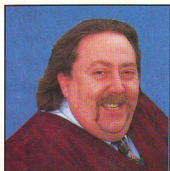
subsequent) files, use the "f_snext" call (Panel Three). If the "f_snext" call is successful, you will find the new file name and extension at byte offset 30 within the DTA.

DTA Buffer Construction



Send your assembly problems and queries to Andy Gisby at: Assembly Line, *ST FORMAT*, Future Publishing, 30 Monmouth St, Bath, Avon BA1 2BW.





Mac Marsden returns from three weeks in the Bahamas (you wish, Mac) and gets back to the serious task of answering your questions.

HiSoft C Centre

PROJECT XI

Q I have been trying to get to grips with the HiSoft C Interpreter for a while now. One thing has me baffled: what is a project file? **John Lightfoot, South Wirrel, Cheshire**

A John, the project section is one of the more advanced features of HiSoft C. All applications comprise one or more files, and these files can be split into two types: 1 C source files. These are the programs you write in C. In our case, these source files are interpreted by the Interpreter. C programs are composed of several modules, which are loaded together and interpreted. 2 Files composed of executable code containing compiled functions (such as machine code files).

HiSoft C allows up to eight modules to be used as a project. They can be linked and interpreted as if a single large program had been written. And because the modules are linked together, the entire project is loaded into the editor in one operation, ready for you to edit/compile. A project file has the extension *.PRO.

Attached files which are composed of machine code will be loaded automatically. You do not have to specify that they contain machine code. After your project file has been written, activating the RUN command will execute the whole project, not just the currently displayed section.

MAINSTREAM

Q Why does a HiSoft C program have to have a 'main' function? **Barry Gibson, Birtley, Co Durham**

A Barry, any C program has to have a function called 'main' because this function is the first one to be executed. This applies to all variants of C, not just the HiSoft version. If your program doesn't include a main function it will not work, because nothing will be executed. Even if your main function just holds one call:

```
main()
{
    memo();
}
```

it still has to be included.

BAFFLED

Q I have just discovered C, and I cannot get to grips with the 'for' statement. Coming from Basic where:

```
for f = 1 to 10
```

is very easy to understand, I am totally baffled by C. **Martyn Johnstone, Earth**

A Martyn, it's very easy to get confused by this one – it took me a while to get to grips with it. Your:

```
for f = 1 to 10
```

loop becomes:

```
for ( f = 1 ; f <= 10 ; f = f + 1 )
```

In detail, the C syntax is:

```
for ( statement 1 ; condition ; statement 2 )
    statement 3 ;
```

rest of the program;

or alternatively:

```
for ( statement 1 ; condition ; statement 2 )
{
    statement 3 ;
    statement 4 ; /* etc... */
}
```

rest of the program;

As you can see, there are two ways of using the for statement.

If you only have one program statement within the loop, you don't need curly braces {}. If more than one program statement is included, these statements must be inside curly braces.

A REAL GEM

Q I have just acquired my first computer, an Atari STE, which I am over the moon with. One question I would like to ask is: what is GEM? Everybody talks about it, but what is it? This question may not be relevant to your column, but could you put me out of my misery? **Mark, Dover, Kent**

A Well, Mark, GEM stands for "Graphics Environment Manager." GEM enables you to manage your environment graphically, via icons, windows and pull-down menus. This is how the Atari operating system works.

HiSoft C enables you to access around 200 of GEM's built-in functions, making life a

little easier and enabling you to create drop-down menus, open windows, and so on.

CONDITIONAL

Q I keep reading about conditional statements – not only in C, but also in other languages. Could you please explain what conditional statements are, and how they can be used in HiSoft C. **William Brown, Whitehaven, Cumbria**

A A conditional statement is a statement which checks whether something has happened, or whether a variable is at a specific value. If it is, then something else is done. The main statement used for checking conditions within your program is the if statement. For example, if we want to do something when a numerical variable is at a specific value, say 5, the program would look something like the code in Panel One.

Case and switch are also conditional statements.

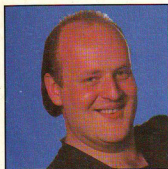
PANEL ONE

```
main()
{
    int x; /* initialize x as numerical variable */

    for ( x = 0 ; x < 100 ; x = x + 1 )
    {
        if ( x == 5 )
            printf ( " \nWilliam, x now holds the value 5 " );
    }
}
```

(all one line)

If you have any questions, or would like to see a particular subject covered, please write to Mac at: HiSoft C Centre, ST FORMAT, Future Publishing, 30 Monmouth St, Bath, Avon BA1 2BW or e-mail him at: mac.marsden@dial.pipex.com.



Q: How many protocols does it take it download a file? **A:** Just one, but it has to be the right one. Frank Charlton explains.

alt.comms.stf@

PAST TIMES

Q Hi there, I am running *MichTron* BBS 3. Could you tell me if there is any way to get it to use ZModem – it only seems to like XModem. I have seen somebody using ZModem on *MichTron*, so is there an upgrade? Does the ST FORMAT BBS run *MichTron*? Steven Reid, New Zealand, via e-mail

A We don't know of any way to get *MichTron* BBS to use the ZModem transfer protocol. Because *MichTron* is a multitasking BBS system, it isn't possible to run external programs, and it doesn't have built-in support for ZModem. We did once hear of a BBS SysOp who had managed to get the bidirectional Jekyll protocol 'working', but it was a quick and dirty hack, to say the least. If anyone has managed to hook ZModem into Mickey, please do write and let us know.

To be honest, *MichTron* is very old and vastly outdated. There are some superb commercial and shareware BBS packages, including *RATSoft* and *Octopus*, and even some freeware programs, such as *ProBBS*. It's time for an upgrade, really. We did run the ST FORMAT BBS with Mickey, but it was shut down a long time ago.

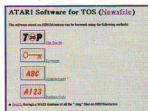
ST VIA PC?

Q I own an Atari STE, and also a PC. I have an internal fax modem in my PC, but my STE has no modem. I would like to get some shareware for my STE from the Internet. Is it possible to download Atari software on

to my PC and transfer it to my STE? If so, how do I do this? Sue Chappell, via CompuServe

A Yes, you can certainly download ST software using your PC's CompuServe account and transfer it to the ST on disk. Standard double-sided 720K disks formatted on your PC can be read in the STE's drive. I presume you know how to download PC software via CompuServe; just follow the same procedure for ST stuff.

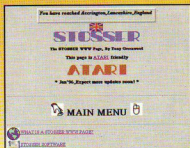
The best Internet sites for Atari software? It's a choice of two, really. The 'mirror' of the massive University of Michigan Atari archive is a good bet. It can be reached by ftp at: src.doc.ic.ac.uk/computing/systems/atari/umich 24 hours a day. Another huge collection of serious software is held at HENSA – the Higher Education National Software Archive. It doesn't carry games, and unless you're connecting from an academic Internet site in the UK, you'll need to wait until after 8pm. The ftp address is: micro.hensa.ac.uk/micros/atari/. Alternatively, it can be accessed from the Web at: <http://micro.hensa.ac.uk/micros/atari.html>. Use the web interface if you can, or you'll be there all night, thanks to HENSA's odd ftp system.



There's no shortage of ST software on the Net, providing you can get at it...

STOS ON THE WEB

If you've been mourning the recently departed STOS Corner, you'll be pleased to hear that programmer and erstwhile ST FORMAT contributor Tony Greenwood has been putting STOS-related material on the World Wide Web. As well as uploading general material on the STOSSER diskmag, Tony has been busy creating the definitive collection of STOS material



on the Internet. To find out more, point your browser at: zenon.airtime.co.uk/users/stosser/stosser.htm.

STIK IT OUT

Q I hope someone out there can help me with a slight problem I'm having with the browser program STIK. It relates to the contents of the DIAL.SCR file.

There doesn't seem to be any way to execute the carriage return command required – if there are no values assigned to either FIND or RESP this command is ignored. So, if anybody out there subscribes to CompuServe and has managed to configure their DIAL.SCR file successfully (or, indeed, their default file), I would be eternally grateful for some help!

Chris Malcolm, via CompuServe

A I'm not sure why you need to leave empty commands in the dialler script. If you simply need to send a RETURN character to clear an on-screen prompt, then using FIND wibble and RESP on its own should work. If it's a case of a blank RESP without a corresponding FIND statement, then just delete the blank RESP.

Unfortunately, we don't have a CompuServe account to test this with, so if anyone out is using the STIK/CAB combination on CompuServe, please get in touch – either e-mail me (see the panel below for details) or contact Chris directly. If you're a CompuServe user, send a message to: 101507.2247. Chris' full Internet address is: 101507.2247@compuserve.com.stf

If you don't have access to e-mail yet, you can snail mail your questions to Frank at the usual address: alt.comms.stf@stformat.com, ST FORMAT, Future Publishing, 30 Monmouth St, Bath, Avon BA1 2BW. Alternatively, you can e-mail him at his shiny new address: Frank.Charlton@diapix.com.

Cyber Talk

FutureNet

Now you can download ST software from our very own FTP site. Find out more by pointing your browser at Futurenet and logging on to the ST FORMAT home page.

JAGUAR

Win an Atari Jaguar!

You've seen the ads over the last couple of months, but you're still a little unsure what FutureNet is all about. Allow me to explain. FutureNet is Future Publishing's rapidly expanding World Wide Web site.

Two months ago we gave you all the software you need to access the World Wide Web, so, why not start your Internet travels with a trip to FutureNet?

What's on offer?

FutureNet includes features, news, essential contacts and links for all of Future's 30-plus

magazines, including .net, The .net Directory and, of course, ST FORMAT.

You can order back issues, enter our competitions and even take advantage of special reader offers, all from the comfort of your ST keyboard. You needn't worry about evil hackers getting hold of your credit card details either, as FutureNet's server utilises encryption software to prevent Internet fraud.

Then, having stocked up on bargains, you can sit back and fill your noodle with the day's Computing News. Or, if you prefer, you can check out FutureNet's World News, which is also updated daily.

You can also download ST software from our FTP site. What more could you want?

Karen Howell



ON THE FTP SITE

The first ST files should now be available on the FutureNet FTP site. We've included all the PD and shareware programs from Cover Disks 71 and 72, plus an assortment of useful utilities.

Programs include Speed of Light, Eagle 2.7, Disk Opus and top demos of SubStation, Alien

Thing and Kev's World.

To take a gander at the files, point your Web browser at <http://ftp.futurenet.co.uk/incoming/futurenet/>. If you're using ftp software, type in: ftp.futurenet.co.uk and go to the directory /incoming/futurenet/. Use your e-mail address as a password.

ST FORMAT DIRECT

<http://www.futurenet.co.uk/computing/stformat.html>

**ST
FORMAT**

The world's biggest-selling ST magazine



Welcome to the ST FORMAT home page, the Web centre for the world's biggest-selling ST magazine. Our mission is to bring you news and reviews about every piece of software and hardware produced for the ST, STE and Falcon, as well as practical, creative and technical advice to help you make the most of your Atari.

Okay, so you know what FutureNet offers generally, but what's available for hard-core Atari buffs?

Features

It's all here in our bite-sized features guide – everything from how to design comics on your ST to the past, present and future of Atari's Jaguar console.

ST Answers

Frank Charlton and the gang crowd into the cyber ward for insane STs... and their owners. Whether you're troubled by viruses, assembly code, comms or badly-behaved STs, this is the place for you.

Machines of the future

We take a closer look at the latest Atari clones, GeSoft's Eagle and C-Lab's Falcon Mk2, and ask whether they have what it takes to topple the TT and Falcon.

Hands on

Find out how to set up a sound studio, transfer pictures to your hard disk and take your ST or STE apart with our practical guides to music, scanning and fitting a composite video port.

E-mail the team

Now you can get in touch with the team that produces ST FORMAT. Whether you want to pose technical queries, suggest features or send us compliments, you're only a mouse-click away from our desktops.

Bargains

Connect to FutureNet and order a back issue or take advantage of our reader offers, all without ever leaving the comfort of your ST.

SCAN IT!

Scanners enable you to enhance your artwork and save your documents. Peter Orsini explains who's who and what's what on the ST scanner scene.

Q & A • Scanning Hardware • Scanning Software • Scanning • Copyright & Wrong

It's hard and dead simple to use, because enable even the most technically challenged ST user to add graphics to letters, photos and reports. They make it easy to produce professional-looking illustrations... and they're great fun.



With over 100,000 hits every day, FutureNet is one of the most popular Web sites in the UK. Point your Web browser at <http://www.futurenet.co.uk> to find out why...

HTML coding made easy

Feeling a little hyper? Expend that excess energy by adding hypertext links to your Web pages. Frank Charlton shows you how.

If you've followed the first two parts of our HTML series, you'll have learned how to format text and brighten your pages with graphics. In this final part, we get to grips with the element which put the H in HTML - hypertext.

Hypertext documents contain embedded links to other related documents, or to other

parts of the same document. Generally, links will be text which is highlighted in some way - using underlined text is the norm. However, images can just as easily be used as hypertext links.

When a link catches your eye, you can easily jump to the related subject. You don't have to work through the document in a linear fashion, you can

skip to subjects you're particularly interested in. Hypertext is a neat way to present information, and can make a text file much easier to read.

Tag team

The easiest way to remember the tag to create a link is to think of it as a Hypertext REFerence - so the tag is HREF. The tags come in pairs and the basic construction is:

```
<A HREF=" " ></A>
```

We're going to show you how to construct a link to another page - either held on disk or in the same on-line directory - by breaking this instruction down.

The first part tells the



The current version of CAB (Internet Access Pack 116) supports more of Netscape's enhancements to HTML, including coloured backgrounds and variable font sizes.

browser that it's a hypertext reference - a link. The equals sign and quote symbols show the browser where the link is going, so:

```
<A HREF="NEXTPAGE.HTM">
```

IMAGES AS LINKS

You can anchor links to images as well as text, or compose a first page that just uses graphic buttons to activate links. It's slightly more complex than creating

1 Since the method for creating graphical links requires two sets of tags - one embedded inside the other - it can be confusing. Begin by creating an IMG tag.

```
EVEREST File Block Search Window Parameters Info
(1) D:\WWW\BETW\B1.HTM
<IMG>
<TITLE>The Boy Fanpage!</TITLE>
</IMG>
<BODY>
<CENTER>
<IMG ALIAS=button SRC="nicklogo.gif" ALT="Nick Peers!">
</CENTER>
<H1>Welcome to The Boy's Fanpage!</H1>
<CENTER>
<IMG SRC=button SRC="CLICK.HTM">
</CENTER>
<IMG ALIAS=button SRC="CLICK.HTM">
```

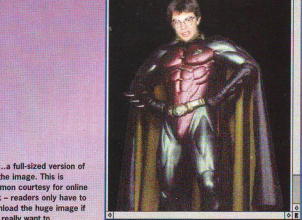


2 Your link appears in CAB as a graphical button, surrounded by a highlighted border to signify that a link exists. In this case, clicking on the small 'thumbnail' image takes us to...

a bare text link, but the tag looks similar. Rather than typing the whole tag in one go, we're going to add the various components step by step.

```
EVEREST File Block Search Window Parameters Info
(1) D:\WWW\BETW\B1.HTM
<IMG>
<TITLE>The Boy Fanpage!</TITLE>
</IMG>
<BODY>
<CENTER>
<IMG ALIAS=button SRC="nicklogo.gif" ALT="Nick Peers!">
</CENTER>
<H1>Welcome to The Boy's Fanpage!</H1>
<CENTER>
<A HREF="BETW09.HTM">
<IMG SRC=button SRC="CLICK.HTM">
</A>
<IMG ALIAS=button SRC="CLICK.HTM">
```

2 The first half of the HREF tag goes before your tag, and the goes at the end. The destination goes between the quotes.



3 ...a full-sized version of the image. This is common courtesy for online work - readers only have to download the huge image if they really want to.

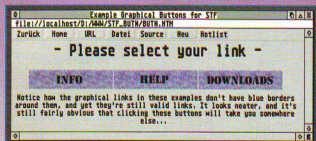
CROSS THE BORDER

If you use graphic images to signify hypertext links, rather than highlighted text, you'll notice the images are highlighted in blue – just like text links. In most cases it's best to leave the image highlighted, so readers are aware of the link.

If you're using an image which has a transparent background, the blue border spoils the effect. Thankfully, there's a way round

this, using another HTML tag. When we showed you the IMG tag last month, we listed various parameters which tell the browser how to display the image. To stop the blue border from appearing, just add the parameter BORDER=0 to the body of your tag:

```
<IMG SRC="PICTURES.GIF"
BORDER=0> (all one line)
The image still functions as a link,
but without the obtrusive border.
```



Remove the image's border to create graphical 'navigation bars'.

instructs the browser to display the page named NEXTPAGE.HTM when the link is clicked.

Since the tags are interpreted by the browser, you'll never see them on screen. You need to add some text between the <A HREF="..." and tags, which the browser will highlight to display the link. Here's a full example:

```
<A HREF="NEXTPAGE.HTM">
View the next page</A>
```

(all one line)

Once this has been interpreted by the browser, you'll see the phrase 'View the next page' on the screen as a highlighted link. The reader just clicks on this text to follow your link.

In this case, the section between the quotes was just a simple filename. If you've already looked at other people's HTML code, you may

have seen something a bit more complex, such as:

```
<A HREF="http://www.
futurenet.co.uk">Jump to
FutureNet</A> (all one line)
```

This is still a valid link, but rather than jumping to another file held on disk or in your

Internet web directory, this link tells the browser to access a site at a different Internet address – in this case, our FutureNet site. [http://](http://www.futurenet.co.uk) tells the browser the linked item is a Web page, and it should use the HyperText Transfer Protocol to download it.

If you're using your work on disk, you won't need to worry about this type of link. If you're working on-line, you

simply follow the <http://> with the address of the page you want to link to. There are other protocols besides [http](http://), but they're beyond the scope of this tutorial, and only affect you if your pages are on-line.

Pictures

A link doesn't necessarily have to take the reader to another HTML document. If you have a simple text

FURTHER READING

A quick trip to the local bookshop reveals a staggering number of books on HTML – usually with a staggering price tag to match.

ST FORMAT's sister magazine .net gave away a brilliant book with issue 14. It covers everything from basics through to advanced tricks. Back issues are still

available – pick up the current issue, or point your browser at: <http://www.futurenet.co.uk/computing/netmag/> for details.

If you're on-line, load the file HTMLSTUF.HTM from the Cover Disk into CAB for an interactive guide to HTML tutorials on the Web. It's all out there...

file which doesn't need any links and is only displaying information, the browser can display just as it is. Enter the text file's name between the double quotes and the browser will display it as a bare (unformatted) text file.

Alternatively, you might want a link to jump to a picture. Once again, you don't need to embed the image in a page of its own – just place the picture's filename between the double quotes. The browser automatically displays a GIF image in a window.

Most browsers only provide routines to format and display text and one or two image types. Many Web pages contain links to other types of files, though, such as sounds

and animations.

So, how does your browser cope with file types which it doesn't understand? Simple – it uses separate programs

known as helper applications.

A helper is a simple program designed to display an image, play a sound file, or do anything else the browser can't cope with. When the browser hits one of these files, it downloads the file and passes it to the helper to be played or viewed. You can add helpers

to CAB, too. We'll be covering this in detail in next month's Internet feature, as well as explaining how to set up everything you need to access the Web, e-mail and ftp via an Internet Service Provider.

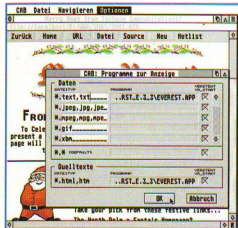
Sounding off

The PC's WAV format is probably the most common sound sample format on the Web. If you're intending to put sounds on-line, it's the best format to use, because Mac and PC owners will then be able to listen to your samples.

Oddly enough, while programs like 525 enable you to convert samples to WAV format, we haven't found a reliable helper to play them back. There's an excellent WAV player for the Falcon though, called PLAYWAV – check your favourite PD libraries and Bulletin Boards to find a copy.

Over to you

That wraps up this series – you should be creating some smart HTML pages by now. Don't despair if you're stuck or need help with some of the more advanced HTML tags – just write to the usual ST Answers address. Next month we'll be bringing you a detailed guide to getting on-line – not only with CAB and STIK, but also with AtariNOS and Oasis for full Internet access. *sf*



Adding 'helper applications' to CAB is fairly straightforward.

DON'T FORGET...

When you've finished your hypertext opus, you'll want the world to see it – and here's your chance. As we mentioned in the first tutorial of this series, we're planning to put the best of your creations on-line at FutureNet.

We're looking for well-designed work with more than a hint of originality, so get working. Your pages can be about absolutely anything, with one condition – you can't use any copyrighted material. If you do, we won't be able to display them.

Stick your creation on disk

and send it to: ST FORMAT Webstring Competition, ST FORMAT, 30 Monmouth Street, Bath, Avon BA1 2BW. If you're on the Net, you can e-mail your entries to: de18@diapixep.com (please put 'HTML Compo' in the subject line. Entries must be in by Friday 15 March, so get cracking!





The Score

Andy Curtis, king of the keyboard, presents the latest MIDI news, answers your MIDI questions and takes a look at MIDI and music shareware.

Falcon Sunrise

Sunrise Electronics has announced its new Falcon analog input/output unit, the SE-800. The unit not only replaces SoundPool's FA8, but also provides a complete analog I/O system for use with Cubase Audio and many other direct-to-disk recording programs.

The SE-800 uses pro-quality DA converters and enables you to record eight audio tracks simultaneously

with Audio Tracker. Housed in a convenient 2U case, the SE-800 has space for your FDI in the back, and thus provides a straightforward single-cable link to your Falcon. Many musicians have complained about the fiddly nature of the FDI/FA8 combination; the SE-800 replaces it with a single, elegant, 19-inch rackmount unit with LED input and output indicators.

It is possible to input audio

via the FDI, in order to avoid using the Falcon's own microphone input, but the SE-800 provides a much easier solution and far higher quality. The interface is due for launch any day now, so expect a full review very soon. Contact Digital Media on 0181 6562442 for more information.

ZERO-X

Zero-X is a highly acclaimed sample editor – version 1.04 recently scored 91% in our sister magazine, *Future Music*.

Features new to version 1.04 include time stretch, compare loops, phase shift, cross-fade of samples and support for many professional sample formats. Zero-X can also transfer data between samplers using your Atari's SCSI or MIDI ports.

Zero-X costs £169 through UK distributor Digital Awareness. Call 0181 4403440.

MIDI Programs

Solid-Beat Drum Patterns

All Atari

This single MIDI file is 200 bars long and contains 50 four-bar drum patterns in a number of styles, all in the 4/4 or 'common' time signature. Most are pop or rock patterns, but they are faithfully executed and will be of enormous help if you have difficulty putting together good drum beats. There are no drum breaks as such, just lots of eight- and sixteen-beat rhythms.

One drawback is that the velocities are fixed throughout the drum-kit. The kick and

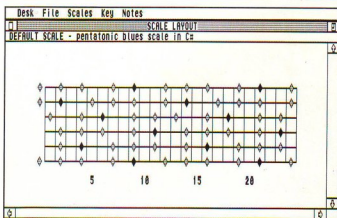
snare drums are set at 94, while the hi-hats are set at 64. This makes many of the rhythms sound mechanical, but you can easily edit the velocities in your sequencer to add sparkle and make the patterns more believable.

SMF Player

All Atari

The *Standard MIDI File Player* is possibly the most versatile MIDI file player for any Atari. It loads in any resolution on any machine, and works as an Accessory if you change the APP extension to ACC.

The program simply loads and plays any type 0 or type 1 MIDI file using the built-in MIDI port on your Atari. The only feature it lacks is the ability to work in the background. Even if you have a sequencer, *SMF Player* is still a



Blues scales and weird tunings are no problem for *The Guitar Reference*. Even the trickiest blues scales can be learned from the supplied database.

quick and easy way to access your MIDI files.

The Guitar Reference

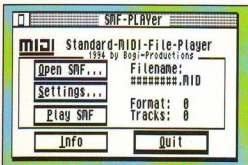
All STs, medium or high res

Scales are the heart of great guitar solos. Some guitarists know only one or two different scales, and this makes their solos rather repetitive. If you can only play blues scales in one key, for example, this limits your usefulness as a player.

The Guitar Reference is just the job when you need to know how to play a difficult scale in an unfamiliar key. It is an editable database of guitar

scales which displays graphically, showing you exactly which strings and frets to use. If you've always wondered how to play a blues scale in C# Major, worry no more – *The Guitar Reference* has the answer.

As well as studying the built-in scales, you can edit or create your own scales and store them for future reference. Provision is also made for different tunings. Some scales only work with the six guitar strings tuned conventionally – *The Guitar Reference* enables you to store your scales with the modified tunings. It's an excellent program for learning from and can be used as a sketch pad for your ideas.



SMF Player is the easiest to use and most compatible MIDI file player. It works in any resolution on any machine.

Quick questions

MIDI MERGER

Q I am using a tape synchroniser with my Fostex R8 because I needed to play in new MIDI lines as well as listen to the sounds on the tape. The trouble is that it doesn't work! The sequencer never picks up the time code from the tape.

I have checked the connections again and again, but with no joy. The audio signals seem to be going through, because when I take the merger out everything works just fine. The merger box is an MTC-1 and the synchroniser is a Philip Rees 3M.

George Farnon, Clapton

A I think you have the two boxes mixed up here, George. The MTC-1 is the Fostex synchroniser and Philip Rees makes merger boxes.

Beyond that, it sounds to me as if you have plugged your MIDI

cables incorrectly. Check carefully on your 3M and you will see that input A is specifically for MTC signals. It will work as a standard MIDI input channel, but the other two inputs will not support MTC. If you re-plug the cables bearing this in mind, you should be able to sort the problem out.

LOOP THE LOOP

Q I have just purchased a Roland E-38 keyboard and am trying to use it with the Concerto sequencer from Microdeal. However, every time I try to record, the notes will not record, and not all the notes release.

I can play back example files perfectly. I can record from my Yamaha TG100 tone generator using a Roland EP7 as the master keyboard. When I borrowed a copy of Notator, the E-38 recorded perfectly. It is just recording from the E-38

to Concerto that is a problem.

I have a 4MByte Mega STE, with a hard disk. Any suggestions you have would be gratefully received.

Jeremy Kent, Starnberg, Germany

A It sounds as if you have a MIDI loop running through Concerto back to your E38. The solution is to put the keyboard into local mode so that it cannot play its own sounds without the computer. Notator may have been providing a software filter to help you with this problem, but the best way to fix it is to change the keyboard's settings. Your E-38 manual should explain exactly how to set local mode.

IDE AUDIO

Q I am considering upgrading to a Falcon computer in order to

use the direct-to-disk recording possibilities. I already have a 700MByte IDE drive that is really fast, so why can't I use it as a drive for Cubase Audio? So far no-one has given me a good reason.

Alex Garfield, Wentworth

A Okay, Alex, here are two good reasons. First, there is only room for a 2.5-inch drive inside a Falcon, so chances are your 700MByte offering won't fit.

The second reason is that the drive really isn't fast enough to handle the speed at which audio has to be written and read. Your best bet is to sell the IDE drive and get hold of a SCSI equivalent. If you have 14MByte of RAM fitted, almost any modern SCSI drive will be perfect for the job.

For an overview of hard-drive technology and a round-up of drives, see issue 73's Space and Time Solution feature.

Music Box 4.4

All Ataris, ST medium or high res

Music Box is a simple database for your records and CDs. The unregistered version is limited to just 60 records, but it demonstrates the abilities of the program well. The forms are quite sufficient for storing all the information you need and a search facility enables you to find records quickly. If you want to keep track of your music collection, this is the ideal tool.

Robo Bop

All STs, medium or high res

Robo Bop makes it easier to create good rhythm tracks. First, you need to assign your drum setup in the setting page, making sure that the note numbers refer to the correct drum sounds on your keyboard. You can then create random patterns on each drum, or 'paint' your own

rhythms by clicking the mouse. Clicking the left mouse button places a drum hit on the grid; a right click removes a hit.

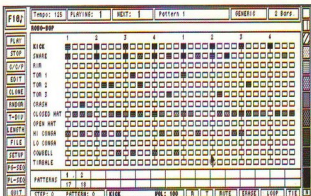
To make the whole process more musical, all the note velocities are editable, making it possible to produce natural-sounding drum parts with the minimum of fuss. When you're happy with your creation, simply save it as a MIDI file and load it into your sequencer.

This program really is easy to use - whether you want to make weird or conventional rhythms, the process is simple and straightforward. In short, it's a corker of a program, well worth getting just to play with for fun.

Cubase Help Accessory

All STs

This handy Accessory helps Cubase users track down keyboard shortcuts. Instead of rooting through a massive



Far from robotic, Robo Bop is your key to both natural and weird drum patterns. Any pattern can be saved as a MIDI file for later use.

manual, you can access the Accessory from within Cubase and quickly locate the information you need. The help data file is editable, enabling

you to expand the system to include any other useful snippets of information you would like to have easily accessible. *stf*

MIDI SHAREWARE

All the programs covered in this section are available in self-extracting archive form from Ad Lib PD on a single disk. To get yours, simply send £2 and a stout self-addressed envelope to: Ad Lib PD (The Score 80), 22 Alexandra Street, Pelton, Chester-le-Street, Co Durham, DH2 1NT.

Copyright © 1988 by Antic Publishing, Inc.			
TOPICS	SEARCH	Transport Functions	KEYBOARD COMMANDS
TRANSPORT Functions (Numeric Keypad):			
	*	Activate Recording	
Enter / Return		Start/Continue	
0 or Spacebar		1st time: STOP	
		2nd time: Goto LEFT Locator	
		3rd time: Goto 1.0.0	
	(	Rewind	
	)	Fast Forward	
	1	Goto LEFT Locator	
	2	Goto RIGHT Locator	
Shift + 1		Store Song Position as LEFT Locator	
Shift + 2		Store Song Position as RIGHT Locator	
3 to 8		Goto Cue Point 3-8	
Shift + 3 to 8		Store Song Position as Cue Point 3-8	

The Cubase Help Accessory can help you locate elusive keyboard short-cuts. You can edit the data file to add any other information you need close at hand.

Breakthru — the low-down

If *Breakthru's* menu functions have scrambled your brain, sit back and let Andy Curtis sort it all out.



If you've got a tempo in your head, enter it by clicking your mouse.

Breakthru's various editing screens are supplemented by a set of functions in the MIDI and Options drop-down menus. There isn't enough room to cover every single function, but we'll look at all the more important ones in this whistle-stop round-up.

Click tempo

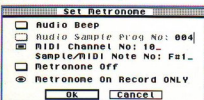
Setting the correct tempo for your music isn't always straightforward. Fortunately, *Breakthru* enables you to click the mouse in time with the tune in your head and read out the tempo.

Count in

Most sequences offer a count-in feature, but *Breakthru* has an Auto setting which cycles the count until you start playing.



Forget fixed count-ins, just set *Breakthru* to Auto and start when you're ready.



You can use a MIDI click as a metronome. Die-hard beep freaks can still listen to the ST's dulcet tones.

Instead of waiting for the crucial moment, you can just start when you're ready.

Set metronome

Breakthru operates a dual metronome system, incorporating a computer beep and a MIDI click. The MIDI click can be on any MIDI channel and you can specify exactly which note value should be sent. This means that you can select the drum sound you want to hear as the metronome. You can also set the metronome to be active only during recording.

Song notes

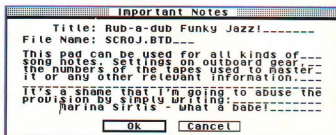
As well as the rather limited eight-character filenames that TOS uses, *Breakthru* gives you a much bigger field which can hold a more descriptive title for your work. There is also a large comments box which you can use to record any details relevant to your song.

Set filter

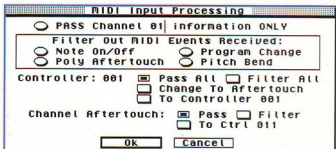
MIDI filters are very useful for getting rid of unwanted MIDI data. Continuous data, such as aftertouch, can really clog up your MIDI data flow if you send it by accident. Many keyboards also send program changes out when you modify their patch settings. You can avoid all these potential troubles by filtering your MIDI data as it comes in.

Sysex

As well as recording MIDI note and controller data, *Breakthru* can also act as a simple but effective System Exclusive MIDI data recorder. Use the Sysex menu option to



The Song notes function enables you to enter extended filenames and useful notes.



Getting rid of unwanted MIDI data from your mother keyboard is a breeze.

load and save panel data from your synthesiser. As well as setting the data to load with the current song, you can load independent sets of data and send them to the synth of your choice in order to change complete setups automatically.

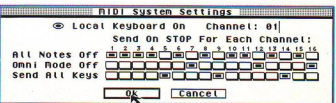
Many people are apprehensive about using Sysx, but it's really just a way of recording your synth's settings. This snapshot of the settings can be re-loaded at any time.

Mode messages

Some synths won't respond to the conventional 'all notes off' MIDI messages, so you can be left with hanging notes when you stop your sequencer. This handy feature enables you to

send the correct 'stop' message to each of your synths. If you are having problems with one or more synths leaving hanging notes, try changing the stop command on the relevant MIDI channels to one of the two other options.

Do experiment with the menu options — they can enhance the way you work and save you time. Don't be frightened off by a complex-looking set of functions. As long as you have your work saved, you can't do any damage to your song. If you really don't understand what something does, enter some values and see what effect they have on your music. You might be pleasantly surprised. *sf*



If you get hanging notes when you stop your sequencer, try altering the settings here.



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"Breakthru's handling of samples sets it apart from other sequencers ... the results are excellent" - ST Gold Award 90%

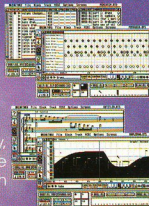
"a Winner" - Future Music Platinum Award 90%

BREAKTHRU 2

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"An easy-to-use professional sequencer and sample player, now in a class of its own" - Future Music Platinum Award (againt) 94%



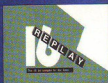
* Plus versions include a hardware interface to give an extra MIDI out.

BREAKTHRU

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Score Printing Kit allows you to printout your music as score. This can be either a single part or full score/system, with full control over margin widths, bar and page numbering and stave spacing.



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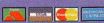
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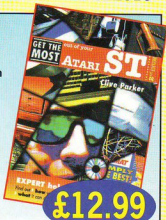
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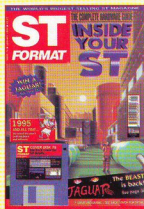


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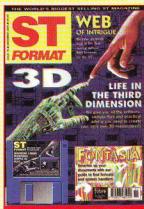
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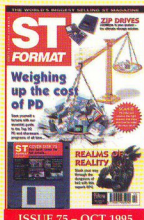
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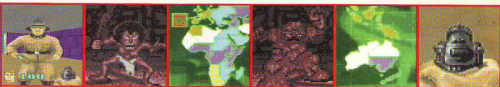
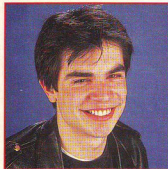
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Stay Onnatop with our solution to *Towers* and assorted cheats for the Jag. Nick 'shaken, not stirred' Peers gets his Walther PPK ready.

Gamesbusters

The shareware role-playing hit *Towers* scored 84% in last month's PD section. Now we've got together with JV Enterprises (which is currently developing *Towers 2* for the Jaguar) to provide the full solution. There are 15 levels in all, and over the next few months we'll be providing maps and solutions for each and every one.



Yep, it's the key to the maps.



GET IT HERE

Towers comes on two disks and runs on all IBM/Byte Ataris. It is available from any good PD library - if your usual library doesn't have it, try LAPD on 01773 761944.

Level 1

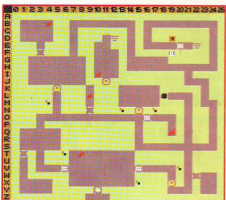
IT'S A KEY AWAY

Because the boulders block your exit on level one, the only way out of *Towers* is to head up. It's a good idea to pick up all the food you can find. Don't eat it all now, though - food will become much scarcer on later levels.

If you come across a monster and you manage to defeat him, don't forget to take his club to increase your offensive capabilities.

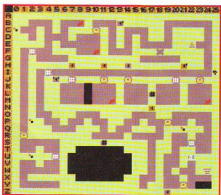
To get to the second level without magic, you need the key at Q19 to use on the keyhole at E19. Don't forget to make a note of the number at E19.

Items of interest on level one include food, a scroll (B4), a bag and armour (H14), a dagger (Y4), the Feather Fall Ring (W24) and rocks for throwing or slinging (Y10, Y11).



Level 2

WHICH WAY?



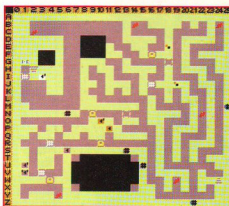
Items of interest on level two include food, the Gloves of Strength (G20), and an axe and armour (B8).

Find the key at M23. You can use this at the keyhole at I7 or I11. Keep unlocking doors until you find the Jewelled Stone Key (M11 or M16), and use it in the lock at B12.

Next, get the key from Y5 to unlock the door at I5. Work your way around the level until you find the Wooden and Stone Keys that unlock the next two doors. Take the staircase to level three as soon as you no longer see keys in front of your eyes.

Level 3

FIND THE J IN JV



The third level contains food and rocks (X23, H9), bags (C2, G11), scrolls (C2, K12), and a long sword and armour (B14).

Get the keys from B24 and B22, then read the scroll at O15 for a hint on how to continue. Go to the secret door at N15, open it, and walk through.

From this point, you can go back and forth to the hallway at R15 until you've unlocked all the doors using the keys you've found. Once you've got the Steel Key from Y1, you can use it at J3 to access the next level.

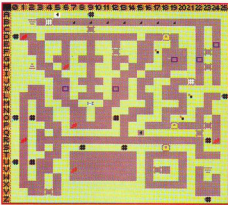
FIND THE V IN JV

Watch out for the Bag of Holding (H12), the Fire Resist Ring (H6), the Regeneration Ring (W5), scrolls (R24, D1) and armour (H6, R1).

The game gets harder from this point on. Watch out for the Norkers: slouching creatures with spiked clubs. There are hidden traps on this level, too, so stay sharp!

Once you've worked out how to manoeuvre, get the Stone Key from T24 to work the keyhole at R15, then get the key behind the secret wall at V18. At H22, sidestep through the secret wall to avoid the trap. Do the same at F24.

When you enter the hallway at B21, the floor plate to the west activates one of seven Norkers. Fight them one at a time, then use the silver key to unlock the door at the end of the hallway.



TOWERS SPELLS

There are no less than 23 spells in *Towers*. This month's Magic-to-English guide takes you through all the low-cost incantations. Next month we'll cover mid-priced spells...



Spell Name	Incantation	Mana	Effect
Magic Missile	Me Ra Ki	2	Damage is equal to your experience level, distance 6m
Cause Fear	Kele Ki	2	Forces your enemy to run away
Lesser Heal	Men Sir Pab	2	Restores two to four hit points
Magical Shield	Xas Me	2	Adds two points to your defence level
Feather Fall	Ra Ke	4	No damage when you fall
Poison Arrow	Xas Ki Ke	4	Damage is three times your experience level, distance 8m

JAG CHEATS

Since we announced the return of Jag coverage in *ST FORMAT*, we've been inundated with tips for popular Jag games. Thanks to Don Fripp of Brokenhurts, Hants, and Atari UK for these excellent cheats.

● Cannon Fodder

After a troop has been wiped out, you can regain their lost weapons by making sure you have at least two men left with some weapons. Split off another troop, without giving it any grenades or bazookas. This new troop will get the old troop's weapons. Also, to bring up a quick map display press #, 0 or *.

● Syndicate

Enter TO THE TOP as your company name to start with \$100 million, all the weapons and mods, and access to all of the missions.

● Wolfenstein 3D

To select different levels, hold down [1], [3], [7] and [9] when you see the title screen. And if you fancy something different, you can access the following cheats during play or in the Automap mode (type the codes in the order given):
God mode: [4], [6], [6] and [8].
Full inventory: [4], [9], [9] and [6].
Next level: [4], [7], [8] and [6].
Previous level: [4], [6], [9] and [6].
Refresh info: [4], [8], [8] and [7].



Wolfenstein 3D was the first of the *Doom* games to make it big, and we've got all the codes Jaguar owners could possibly need.

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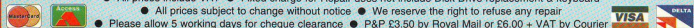
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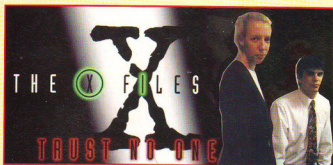
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Feedback

The rain in Spain falls mainly on Karen – who answered your letters and then went on holiday.



The truth is in the ST FORMAT office... somewhere, Nick had it last.

The 'ex' files



Is it true that Power PD has been sold, and that the Power disk mag has a new editor? Where is James L Matthews from Top Byte? Why does he not respond to my mail?

Have you any (and I mean any) news which may explain this bizarre disappearance? Could it be he's been abducted by aliens?

I think Mulder and Scully should be sent to investigate... Martin Cubitt, via e-mail

stf: Mulder and Scully have themselves disappeared under mysterious circumstances, but the ST FORMAT team doesn't give up so easily. We sent special agents Nick 'Trust no one' Peers and Mary 'Where's your proof' Lojkin to investigate. Kitted out with standard-issue FBI torches (dirty great things with pencil-thin beams), the two intrepid detectives stumbled around a dark room for a while, then phoned the offices of James 'Deep Throat' Matthews.

"Have you been kidnapped by aliens?" Agent Peers hoped to

QUICKIES

Personally, I think a two-disk publication would take off if supported by the appropriate software houses – for example US Gold, Psynopsis, etc. stf: And what are they going to put on the disks? PC games?

Windows is for homosexuals! stf: You're not very PC, are you?

Why aren't there any MagicMac sections in ST FORMAT? stf: Look very carefully – the clue's in the question.

Why doesn't Atari sponsor a football team? That would surely



Not for us, thanks: Windows 95, in all its technicolour, erm... glory.

get it a lot of publicity. stf: Yep, but knowing Atari's marketing strategy, it would probably end up sponsoring Accrington Stanley.

shock the truth out of Matthews with his bold, daring approach. Lojkin hissed at him under her breath before taking hold of the receiver herself.

"Could you tell us what has happened to Power PD and the Power disk mag?"

"Sure. At the moment I'm winding down my activities with Power PD and the Power disk

mag so that I can concentrate on developing and acquiring new ST programs for the Top Byte label. I'm looking for someone to take over the running of Power PD, so if you know anyone who might be interested, get them to write to me at: 3 Salisbury Road, Maidstone, Kent ME14 2TY."

"And what about the disk mag?" Lojkin asked. She stared intently into Agent Peers' eyes (it was a tense moment).

"That's secret... Let's just say a new editor will be taking over from issue 30. I can't tell you who at the moment."

Agent Peers leaned towards the receiver. "Have the aliens wiped your memory?"

"No. I just want to finalise things before making a statement."

Agent Peers sighed and looked up at the ceiling as Lojkin replaced the receiver. "I'm sorry, Nick," she breathed.

"No aliens. No mutated life-forms. Not even a damn invisible elephant." Without another word, Peers turned on his heel and stalked out of the dark office.

Bad influence



I'm writing to tell you how disgusted I am with TV presenter Andy Crane and what he said about the games capability of the ST. He said the ST wasn't cut out for

STARTING HERE

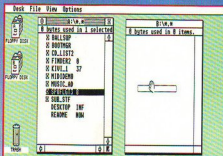
I agree with Neil Davidson's letter (STF 78) about the need for a beginners' section in ST FORMAT. I've owned an STE for 18 months, but I don't feel my knowledge of the Atari, or computing in general, has advanced much in that time due to a lack of basic training on the machine. Much of what is in ST FORMAT is above my head. An absolute beginners' page is a must for me. MD Neulroid, Leicester

I have a 1040ST, which a friend gave me in July. I am over 60 and previously unacquainted with anything electronic. So when I read the very last words in issue 78, I was roused to add my voice to the plea for an absolute beginners' section.

The manuals are nobody's nursemaids, and the on-disk instructions are scrappy and often inarticulate beyond belief. So, although I have a mountain of databases, games and other programs, I've succeeded in wrecking a large number simply by blundering around.

Another block to progress is the ever-recurring phrase, "Simply copy this... to the root directory of your boot disk," not to mention autoboots, hot and cold boots, boot managers and customised boots...

So, what about a couple of pages for us? One has to begin somewhere. John D Roles, Liverpool



You wouldn't believe how much trouble the 'simple' action of copying a file to the root directory causes.

stf: We try to eliminate as much jargon as we can, but at the end of the day a boot disk is, erm... a boot disk. We can explain what the term means, but we can't change it.

However, knowing how to create a boot disk and copy stuff to the root directory does seem to be a common problem. Next month we'll be giving you a complete, step-by-step guide to doing just this.

I'm still not fully convinced about the value of a regular beginners' section, though. So, if you feel strongly about this subject, get those letters in.

NEXT MONTH

Rough guide to the Internet

We show you how to use CAB, send e-mails, attach files, post messages to newsgroups and download software from ftp sites – in other words, everything you need to master to get the most out of the Internet. Plus: how to choose your modem and service provider.



A new adventure

Create your own fantasy world – we show you how to write a text adventure in GFA Basic.

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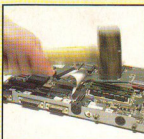
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And here we see Andy Crane practising his ST gaming skills.

games, and that the games available were rubbish (or words to that effect). He then threw the ST away and it crashed to its death with a loud smash.

He then moved on to an ST with a MIDI setup, which he praised to high heaven. This simply proves that Andy Crane is as stupid as his haircut. He obviously hasn't played any of today's excellent games, such as *Obsession*, which show off the ST's games capability perfectly. **Lewis Carr, Saltaire**

stf: And he seemed like such a nice boy when he was presenting Children's BBC.

European union



In issue 78 you printed a letter from Colin J Ballantyne who was looking for a Falcon for around £500. You suggested he check out the **ST FORMAT**

reader ads. This a good idea, but perhaps I could offer another suggestion.

I'm a member of Atari-Selbsthilfe-Projekt, a self-help group dedicated to helping users on a tight budget. We offer a non-commercial mediating service for anyone looking to buy or sell second-hand hardware and software. We also offer advice and contact addresses.

We don't sell any products ourselves, we simply put buyers and vendors in touch with each other so they can make their own deal. We don't charge anything for our service. If you think we could help you, write to: Atari-Selbsthilfe-Projekt, Marianne Herdt and Michael Kuehnappel, Kaesenbachstraße 19, D-72076 Tuebingen, Germany. **Marianne C Herdt, via e-mail**

stf: So, there you go. If you want to take advantage of Germany's more buoyant Atari scene, or get in touch with other enthusiasts, drop Marianne and Michael a line at the above address.

Send your letters to the editor, Karen Levell, at: Feedback, **ST FORMAT**, Future Publishing, 30 Monmouth St, Bath, Avon, BA1 2BW or e-mail: klevell@futurenet.co.uk. You can also reach her via our Web site at: <http://www.futurenet.co.uk>. Note: letters may be edited for length and clarity.

PIXEL PAINTING



Considering how much time Nick spends watching endless re-runs of *Tazmania*, it's hardly surprising he awarded £25 to P Wayman for this glow-in-the-dark Tasmanian devil. Apart from the dithered background, the entire picture was created in *Cyber Paint*. Paul wrote a *STOS* program to generate the background, which

he then saved as a *Degas* picture and pasted behind Taz's head. He definitely gets marks for effort.

The whole picture took five hours to complete – there was nothing on the television at the time. Paul also sent in a drawing of Sunderland FC's badge, but we're only interested in pictures of Birmingham or Arsenal...

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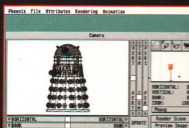
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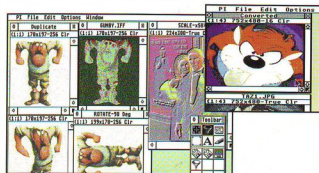
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